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FORT STORY WORLD WAR II AND COLD WAR ERA BUILDING SURVEY VOLUME 1 OF 3:
PROJECT REPORT FORT STORY VA
12/1/1999
ENGINEERING & ENVIRONMENT, INC FORT EUSTIS VA



USATC ENVIRONMENTAL

U.S. Army Transportation Center
Fort Eustis, Virginia

December 1999

Fort Story World War II and Cold War Era Building Survey Virginia Beach, Virginia

A Reconnaissance Level Survey and Evaluation of Architectural Resources

VOLUME I of III: Project Report



**FORT STORY
WORLD WAR II AND COLD WAR ERA BUILDING SURVEY
VIRGINIA BEACH, VA**

**A Reconnaissance Level Survey and Evaluation
Of Architectural Resources**

FINAL REPORT

Prepared for



The U.S. Army Transportation Center
Fort Eustis, Virginia

by

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Contract No. DACA65-95-D-0091

DECEMBER 1999

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Cover Photo: Soldiers of the 246th Coast Artillery heckle Adolph Hitler with their scribbling chalked on 2,100 pound projectiles before they were fired from 16-inch Howitzers during target practice on June 10, 1941. (Photo by Lloyd Jordon, Fort Story Photographer) (Courtesy of the Collection of Mr. Fielding Lewis Tyler)

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ACKNOWLEDGMENTS

The study team of Engineering and Environment, Inc. and Sadler and Whitehead Architects, PLC would like to thank the following people who provided welcome assistance in the course of our survey:

1. Libby Alfriend, the Public Affairs Officer at Fort Story, is the keeper of Fort Story's historic archives. Her cheerful assistance was critical to our investigations.
2. Fielding Lewis Tyler, Executive Director of the Old Coast Guard Station, generously gave us full access to materials he has painstakingly gathered and edited over the course of a lifetime investigation of coastal defenses. He shared extensive research and carefully organized documentation related to Fort Story's guns, Howitzers, bunkers, and support buildings.
3. Gary Longmire responded to the full range of questions we posed concerning the buildings in his charge. He was responsible for our gaining access to structures throughout the facility. His insights were essential to our investigations.
4. Ben King, Fort Eustis historian, kindly opened his files on Fort Story's mission.
5. David J. Johnson and Dennis Mroczkowski, Director, at the Fort Monroe's Casemate Museum gave us access to their photographic and archival information.
6. Chris McDaid, Cultural Resources Consultant to HQ TRADOC, for helping us obtain Photos 8, 20, 23, and 26 and for scanning several of them into electronic files.
7. Lieutenant Colonel and Mrs. Ronald Newton, who kindly allowed us access to their home, the Cape Henry House.

Without the generous assistance of those listed above, this report would not have been possible.

Ms. Sadler conducted the field survey with Hank Ghittino (formerly of Engineering and Environment, Inc.) who photographed the buildings. Mary Harding Sadler, AIA, Principal Investigator, wrote this report with assistance from Peter McDearmon Witt, AIA and Camden Whitehead, AIA. Ms. Sadler, Mr. Witt, and Mr. Whitehead are historical architects who meet Federal Professional Qualifications (U.S. Department of the Interior 36 CFR Part 61, see Appendix C). Marlene Ivester with Engineering and Environment, Inc. edited, formatted, and produced this report with assistance from Jim Madson, also with Engineering and Environment, Inc. Mr. Madson entered all field data into the Integrated Preservation Software (IPS) database and generated the reports found in Volume II, Appendix B. Ms. Ivester and Mr. Madson also coordinated deliverable requirements with the Department of Historic Resources (DHR) in Richmond, Virginia.

ABSTRACT

Within Fort Story, there is a potentially eligible historic district, which includes 57 significant structures and one significant site (the gun emplacement for Buildings 216 and 217). These findings, as well as others presented in this report, are the result of investigations carried out between November 1998 and July 1999 at Fort Story, a U.S. Army Facility in Virginia Beach, Virginia. This architectural survey was initiated by the U.S. Army Transportation Center, Fort Eustis under Engineering and Environment's Contract No. DACA65-96-D-0091 (Delivery Order 0043).

The purpose of the investigations was to survey and evaluate the significance of permanent buildings and structures at Fort Story. Temporary buildings (including buildings designated as temporary because they are of frame construction) were not included in the survey, with the exception of Building 587, the original Commanding Officers Quarters. The focus of the study team's effort was identification and evaluation of architectural resources over 50 years old. A majority of the significant structures are concrete buildings, bunkers, batteries, and magazines built from 1918 (when Buildings 300 and 301 were built) to 1949, just prior to when the Chesapeake Bay Sector of the Harbor Defenses was inactivated. The study team's investigations also included structures related to a Nike-Hercules Missile launch area at Fort Story. Although the Nike launch area is less than 50 years old, it was the central component of a missile program integral to the strategic defense systems of the Cold War. The Nike launch area incorporates the last defense structures installed at Fort Story.

Two hundred and eighty-six buildings (286) are listed in Fort Story's real property records. A majority of the buildings listed as *temporary buildings* on the Army's property records are probably not significant, although a group of these buildings were early cottages within the Cape Henry development and were privately built prior to and after a garrison was established at Fort Story. Under a 1986 nation-wide programmatic agreement, the Department of Defense may demolish World War II era temporary buildings. This agreement does not address World War I temporary buildings. The study team's scope of work did not include buildings designated as temporary structures. However, they are briefly mentioned in this report in order to present an overall picture for planning purposes.

Of the 286 listed buildings, the study team feels that 57 permanent Army structures meet National Register Criteria for contributing buildings in a potentially eligible historic district because of Fort Story's role in national defense and Cape Henry's place in state and national history. This historic district is defined by the installation's boundaries and is eligible under National Register Criterion A: *Properties Associated with Historic Events*. Two of these 57 structures individually meet National Register Criteria: Cape Henry House, the Commanding Officer's Quarters (Building #734), and the Chesapeake Transit Company Railroad Station (Building #591).

Cape Henry House, constructed in 1918 as a weather bureau, is eligible under National Register Criterion A because of its role in marine weather observation and recordation and under Criterion C: *Design/Construction* because of its unique architectural features.

The Railroad Station, built in 1902, brought passengers --tourists and residents--from Norfolk to Cape Henry three years before Virginia Beach was incorporated as a town. Consequently, this building meets Criterion A because of its association with the development of Virginia Beach.

The original Cape Henry Lighthouse is a National Historic Landmark located within the boundaries of the potentially eligible historic district (identified by the study team) and is owned by the Association for the Preservation of Virginia Antiquities. The old Cape Henry Lighthouse was the first lighthouse built by the Federal government. The "new" (1881) lighthouse, also sited within the boundaries identified by the study team, is part of a U.S. Coast Guard reservation that has been determined to meet National Register Criteria. In addition, the National Park Service owns a parcel of land within Fort Story (the Cape Henry Memorial), which memorializes the First Landing with a 1935 cross and commemorates the Battle of the Capes. The study team did not formally survey any of these properties.

1.0 INTRODUCTION

Fort Story, a 1,422-acre Army facility, is located at Cape Henry in the City of Virginia Beach, Virginia. Cape Henry's defense systems at one time surpassed the gunpower of any other mid-Atlantic fortification. After its first permanent gun emplacements, 16-inch Howitzers paired at batteries now known as "Pennington" and "Walke," were complete, Fort Story was called "the American Gibraltar." Fort Story is a sub-installation of the U.S. Army Transportation Center, Fort Eustis.

A mid-1980s survey of Fort Story by MAAR Associates (*A Cultural Resource Overview and Management Plan for Fort Eustis and Fort Story, Cities of Newport News and Virginia Beach, Virginia* – updated in April 1989) indicated that only the railroad station (Chesapeake Transit Company Railroad Station) might be considered significant. However, since MAAR Associates' report was written, buildings of the World War II era have passed one-half century in age and the Cold War ended. Therefore, hundreds of thousands of buildings owned by the Department of Defense have been evaluated and re-evaluated since the 1990s, and many permanent World War II era properties, and a number of Cold War era properties, have been determined to be significant.

In recognition of the need to reevaluate historic properties, and to meet the Army's regulatory responsibilities under Section 110 of the National Historic Preservation Act, the U.S. Army Transportation Center, through the U.S. Army Corps of Engineers, Norfolk District (Norfolk COE), initiated a reconnaissance (Phase I) level architectural survey of Fort Story. The purpose of the survey was to determine if any of the Army's permanent buildings or structures at Fort Story should be considered significant historic properties.

The study team conducted the survey of Fort Story's permanent buildings (specifically those buildings over fifty years old or related to the Nike Missile Program) between November 1998 and July 1999. The study team's findings are based on state and Federal standards and guidelines, including National Register of Historic Places Criteria for evaluation. The National Historic Preservation Act of 1966 (Section 110) requires that Federal agencies take active steps to identify and protect their historic properties. This report is a result of investigations undertaken to determine the significance of built resources located at Fort Story.

2.0 HISTORIC CONTEXT

Fort Story is comprised of 1,422 acres of coastal property with Cape Henry roughly at the center of its four mile long shoreline (Figure 1). It is bounded on the south by Route 60 and First Landing/Seashore State Park, on the west by the State Park Campgrounds, on the northwest by the Chesapeake Bay, and on the northeast by the Atlantic Ocean. Near the center of Fort Story's shoreline stand two historic lighthouses and the Cape Henry Memorial. Because of its location at the mouth of the Chesapeake Bay, Cape Henry has been, since Virginia's initial colonial settlement, a strategic defense location. Today, Fort Story's unique setting makes it the Army's only training facility for the logistics-over the shore (LOTS) training essential for the Department of Defense's mobilization of materiel and supplies during conflicts on foreign shores.

2.1 European Settlement to Society (1607-1750)

English Settlement

The fortification of Cape Henry began with the 1607 arrival of English colonists in three ships: the Susan Constant, the Godspeed, and the pinnacle Discovery. The mouth of the bay was a broad twelve miles at its greatest extent, and then, as now, it was framed by two capes, which the colonists named for their monarch's two sons Henry and Charles. The first landfall of these colonists was on April 26, on the southern shore of the entrance to the Chesapeake Bay, the nation's largest estuary. For four days, the party explored the land around the newly named Cape Henry. Finding dunes, "fair meadows and goodly tall trees,"¹ but recognizing no readily defensible sites to protect a new colony, the first Virginians decamped and set about exploring the littoral of the bay. Before moving inland on April 29, the Englishmen placed a cross at their landing to commemorate their safe arrival at the place they had named Cape Henry. (An aside: In 1935, the Daughters of American Colonists placed a stone cross at Cape Henry. To this day, the cross (see Photo 1) is the destination of an annual pilgrimage commemorating the First Landing.)

On May 13, 1607, the English settlers, having moved up the James River, founded a settlement on a low-lying peninsula at the Bay's southern end, naming it Jamestown in honor of King James who had chartered the London Company. The newcomers had been advised to find a sheltered site at some distance from the Bay itself, since its wide entrance would invite the colony's enemies, particularly the Spanish, to make sweeping assaults and Parthian² withdrawals. The river at Jamestown was not nearly as wide; therefore, the settlers could guard its approaches more effectively. Figure 2 is a copy of a historic map, which depicts the extent of English Settlement in the Chesapeake Bay region in 1606; this map is known as the "John Smith Virginia Map, 1606."

¹Captain George Percy, quoted in *The Beach: A History of Virginia Beach, Virginia* (Virginia Beach: Virginia Beach Public Library, 1996), p. 7.

² Parthian cavalymen usually shot at the enemy while retreating or pretending to retreat.

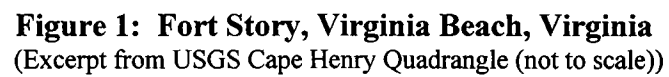




Photo 1: Cross Placed by the Daughters of American Colonists in 1935 (1998)

Trade

The watershed of the Chesapeake Bay covered a large territory in Maryland and Virginia that soon became home to an expanding population primarily devoted to growing tobacco, a product new to the Old World. Four large rivers and their tributaries fed the Bay. These rivers were capable of accepting the largest draft vessels of the day far into the interior of a country heretofore inhabited only by hunter-gatherer populations. Besides the introduction of intensive cultivation of the tobacco cash crop, vast stores of raw materials in wood and other natural resources provided impetus for a flourishing trade. Indeed, at Cape Henry good quantities of naval stores furnished the earliest merchantmen with supplies as they set out for Europe. Here, they stocked up on wood for fuel and “blackwater” for drinking (“Blackwater” contained tannins from the trees growing in the marshes and preserved drinking water for long voyages). What became known as “the Desert” at Cape Henry (see Figure 1) was, until the early decades of the 20th century, not an actual desert but a primeval forest of cypress and other trees with fresh water springs, which for three centuries was a source of water and stores for sailors and watermen. In recognition of the importance of these natural resources, the Commonwealth held the land as public property from 1770 until after the Civil War.³

³ *The Beach: A History of Virginia Beach, Virginia*, p. 39.



Figure 2. John Smith Virginia Map, 1606
(Courtesy of the Virginia Department of Historic Resources)

Early Defenses

The early years of the colony's defensive posture were consumed in securing the Europeans' ever-increasing foothold among the native population, specifically the Powhatan Confederacy. The English colonists extended the dominion of Virginia through a policy of fort and plantation. Defensive strongholds were set up at the frontiers of English control to protect the establishment of settlements behind the lines. Subduing the Native American population remained the primary focus of the colony's military policy. However, the status of Virginia as an outpost of the Kingdom of Great Britain meant that no small effort would be expended to protect its commerce from the depredations of enemy privateers and pirates. Cape Charles and Cape Henry were wistfully considered as potential strong points against an enemy. However, due to the 12-mile gap between the two capes, Governor Sir William Berkley observed that an "enemy's ship may ride out of all possible danger of the greatest cannon in the world." Instead the colonists used Cape Henry as a lookout, employing bonfires to signal ships in the Bay.⁴

As the first colonists had concluded in April 1607, the mouth of the bay could not be defended from Cape Henry's shore and the population of the region was never large enough to support, by itself, a navy capable of preventing piracy. Thus, the government in London was the guarantor of the colony's naval defenses in the seventeenth century, casting a watchful eye at the Dutch and the Spanish as well as piratical entrepreneurs. The Virginian militia contributed to its own defense by posting local lookouts in the counties surrounding the entrance to the bay. Their charge was to report suspicious shipping to local military authority in the hope that some effective response could be raised. Merchant shipping during the Colonial Period was vulnerable to the swift and unpredictable descents of pirates and privateers until the second quarter of the 18th century. One of the highest dunes at Cape Henry was known as Blackbeard's Hill because the notorious pirate used the dunes as a lookout for unsuspecting merchant ships he might plunder. Blackbeard, an Englishman named Edward Teach, was killed in 1718 during an attack funded by Virginia's Governor Alexander Spotswood.⁵

2.2 Colony to Nation (1750-1789)

Colonists Petition for a Lighthouse at Cape Henry

Navigation at the entrance to the Chesapeake Bay and its tributary waters remained a prime consideration of Virginia's colonists. Because land in the region was so interpenetrated by water, the main avenues of commerce were along the rivers and thence across the Bay and overseas. Piloting visiting merchantmen around mudflats and shoals was an important occupation of knowledgeable locals. Because storms and sandbars in Cape Henry's vicinity posed a constant threat to trade and travel, the colonists and their General Assembly formally proposed building a lighthouse at Cape Henry by the mid-18th century. In 1720, Governor Alexander Spotswood suggested to the House of Burgesses that a lighthouse be constructed at Cape Henry. In 1752, Thomas Lee, a native Virginian acting as governor, again proposed building a lighthouse at Cape Henry. This time the General Assembly assented and offered the means to finance such a

⁴ *Ibid.*, p. 40.

⁵ *Ibid.*, p. 35-36.

structure by taxing exported commerce at the rate of two pence per ton a ship's burden. In an action that surely rankled the colonists and presaged later disputes with the government in London, the Assembly's act was overturned in 1759 on the pretext that it hindered the trade in tobacco. By 1772, however, the General Assembly again authorized construction of a lighthouse at Cape Henry and appropriated the funds outright.⁶ Sandstone was quarried for this purpose from Aquia in the north of the colony, and construction began; however, it was soon interrupted by the outbreak of the American Revolution in 1775.

The Revolutionary War

As the colony of Virginia grew more prosperous, the colonists sought greater freedom to determine the Commonwealth's destiny. This newfound sense of independence, coupled with the British government's refusal to make improvements that the colonists thought were essential (such as the erection of a lighthouse), helped contribute to the outbreak of the Revolutionary War. As matters deteriorated in the colony, Cape Henry was close to the growing hostilities. Governor Lord Dunmore, under pressure from Patrick Henry and the extra-governmental Committees of Safety, removed from the colony's capital at Williamsburg to the area around Norfolk where he could be closely supported by British naval power and a large loyalist population. In fact, Norfolk and Princess Anne Counties (modern day Virginia Beach area) were thought to contain so many loyalists that the Virginia Convention sought to remove all inhabitants of the two counties. Several skirmishes took place in Princess Anne County culminating in the British defeat at Great Bridge, the subsequent burning of the City of Norfolk, and the departure of Lord Dunmore by mid-1776.

The Battle of the Capes

Following the departure of Lord Dunmore, the Cape area was quiet, although the British Navy continued to control the mouth of the Bay and could bombard or land in force at will. The strategic importance of the Capes was demonstrated in the closing engagement of the Revolutionary War. In a move to support the Continental Army under George Washington, the French fleet, under Admiral de Grasse, sailed from the West Indies and anchored to form a blockade at Lynnhaven Bay at the end of August 1781. On September 15, 1781, an English fleet of nineteen ships, sent to relieve Cornwallis' besieged troops, appeared at the mouth of the Bay under Admiral Thomas Graves. Instead of attacking the French ships individually as they emerged from their safe harbor, Graves allowed them to take up formation opposite him. Admiral de Grasse's twenty-four ships gave fire on the British fleet for five days, forcing it to withdraw. The French then resumed their blockade of Cornwallis at Yorktown. With Washington's investment on land, the allied French and colonial forces provided the victory needed to effect a British surrender.⁷ A statue of Admiral de Grasse, a bicentennial gift from France (Photo 2), and a monument commemorating the Battle of the Capes (Photo 3) were later placed within the Cape Henry Memorial Park to commemorate this pivotal engagement.

⁶ *Ibid.*, p. 40.

⁷ *Ibid.*, pp. 61-63.



Photo 2: Statue of Admiral de Grasse (1998)



Photo 3: Monument Commemorating the Battle of the Capes (1998)

2.3 Early National Period (1789-1830)

The Lighthouse of 1792

One of the first endeavors of the new federal government was the construction of a lighthouse at the Cape to aid shipping and defense. The Commonwealth of Virginia ceded two acres to the Federal government and Congress appropriated \$15,200 to construct the long-proposed lighthouse.⁸ The Aquia sandstone, which had been quarried near the Rappahannock before the Revolutionary War, was used to build the 30-ft diameter base and the 72-ft high tower. Originally, oil lamps were used to light the structure, then, after 1812, an Argand lamp with metallic reflectors was installed. In 1857, a dioptric Fresnel (or Frênel) lens was added, which provided visibility for 24 miles. In 1855, a Jones fog bell was installed to further aid navigation. The Old Lighthouse, a National Historic Landmark owned by the Association for the Preservation of Virginia Antiquities since 1930, was active until 1881 when it was replaced by a new, steel-plated tower (see Photo 4 – the older lighthouse is to the right, the newer one is to the left).



Photo 4: The Cape Henry Lighthouses (1998)

The War of 1812

The British attack on the United States frigate *Chesapeake* in June 1807 became one of the pretexts for the war with Great Britain that was to follow five years later. During 1807, Great Britain and the French Empire were at war. The British government considered British natives to be Britons and consequently attempted to “impress” any British-born sailors serving on vessels of other nations. In the *Chesapeake* incident, the pattern was predictable: when the *Chesapeake* set out from Norfolk, the British *Leopard* lay in wait off Lynnhaven, just west of Cape Henry.

⁸ *Ibid.*, p. 41.

When the *Chesapeake* refused to hand over any of its sailors, the *Leopard* opened fire, killing three, wounding 13, and taking four sailors. When war was declared in 1812, the circumstances in the local theater of war mirrored those of a generation earlier. The superior British Navy was able to command the open sea and land on shore at will; however, the Commonwealth's hostile population managed to repulse English incursions. Even though the British Navy effectively blockaded the Chesapeake Bay throughout the war, the local militia prevented enemy landings at Chesapeake Beach and Seatack.

2.4 Antebellum Period (1830-1860) and Civil War (1861-1865)

The period before the Civil War was characterized by the continued growth of the ports of Norfolk and Portsmouth and the relative decline of Princess Anne County, where agriculture remained the principal occupation. Unlike other parts of the state and lower South, no strong cash crop emerged to bring prosperity to the countryside. Activity at the Cape continued to be limited to the encampments of watermen fishing the waters offshore and the manning of the lighthouse. Efforts to create a diverse economy in the area would prepare the inhabitants for the future new order, which would follow the South's unsuccessful attempt at independence.

After the fall of Norfolk in May 1862, Princess Anne County was occupied by Federal troops. A certain amount of guerilla activity is recorded but the relatively early occupation of the area saved it from the destruction that plagued hard-fought territories. The most significant event to affect the history of Fort Story was when Princess Anne's Confederate troops destroyed the Cape Henry Lighthouse lens in April 1861 in order to deny navigational aid to shipping at the capes, since the United States Navy controlled the Bay. Until the light could be repaired, a lightship was moored in the shipping channel and Federal troops were dispatched to guard the lighthouse itself. Cape Henry remained under the control of Union troops throughout the war.

2.5 Reconstruction and Growth (1865-1917)

The Lifesaving Station

Despite completion of the lighthouse, shipwrecks continued to occur on the shoals of Cape Henry. In response to a Congressional act in 1871, five lifesaving stations were set up in Princess Anne County by the end of 1875, as part of Lifesaving District Six. The first of these stations was located in "the Desert" near the Cape Henry Lighthouse. The other four were located along the Atlantic, as far south as False Cape near the North Carolina border. Typically, a station consisted of a main building with a lookout platform and boatroom, two surfboats, and rescue equipment. A station keeper was in charge of six surfmen. In the period between 1874-1915, no fewer than 186 wrecks were recorded off the shores of Cape Henry. The lifesaving stations provided not only patrol and rescue, but also temporary hospital care for shipwreck victims.

One long-remembered wreck was that of the steamer *George M. Farwell*, which ran aground in a gale and dense fog in October 1906. Although all lives were saved, thanks to the efforts of the lifesaving station, a fragment of the wreck became a north end landmark near the eastern entrance to Fort Story. It remained there until 1982 when the engine turbine was at last removed from the beach and relocated to the Old Coast Guard Station at 24th Street. The Cape Henry lifesaving station was eventually demolished to make way for batteries built in the primary dune.

The Weather Bureau

Roughly concurrent with the establishment of the Lifesaving Station, the Federal government established a Weather Bureau Station at Cape Henry in 1873.⁹ First housed in the Lighthouse Keeper's House, the Weather Bureau moved to its own building within the Lighthouse reservation in 1876. A masonry Weather Bureau was built north of this building on the shoreline in 1918 (see Photo 5, a recent photo of the building, and Photo 6, a historic photo of the building). Figure 3 is a copy of a page from the Climatological Record, which notes the location of the Weather Bureau from 1873 to 1918. This page is particularly significant as it documents the Weather Bureau's relocation from the Lighthouse reservation to what is now know as the Cape Henry House.

The Weather Bureau building served as quarters and as an observation building. During World War II, it became one of many points from which maritime traffic was monitored. In recent decades, the Weather Bureau, renamed Cape Henry House, has served as quarters for Fort Story's Post Commander and his family. The original frame weather bureau was demolished in 1953.¹⁰ The Weather Bureau continued its operations at Fort Story until 1969.¹¹



Photo 5: Weather Bureau/Cape Henry House (1998)

⁹ _____, *Fort Story Virginia* (brochure in the collections of the Fort Eustis Historian, 1961), p. 9.

¹⁰ James and Frederick Jordan, *Virginia Beach* (Richmond, VA: T. F. Hale, 1975), p. 51.

¹¹ *Virginia Beach: Wish You Were Here*.



Photo 6: Weather Bureau/Cape Henry House, Historic Photo (date unknown)
(Courtesy of the Fort Story Public Information Office Collection)

CLIMATOLOGICAL RECORD.		Cape Henry, Va.
LOCATION OF OFFICE.		
(Give all of the different locations where the station was established.)		
Dec. 15. 1873.	Station first established, one story ^(In dist. house dwelling) Signal Corps Bldg on Light House Reservation near and in front of Light House.	
Nov. 10. 1878.	Second story Signal Corps Building, in front of Light House & on Light House Reservation.	
Aug. 15. 1901	Small one story Building, formerly wing of Weather Bureau, Bldg, temporary office while repairing building, location 5 feet 11 inches Northwest of old Bldg. First obs. taken 8 pm Aug 15, 1901.	
October 25. 1901.	Weather Bureau Building, on Light House Reservation Remodeled & made one story high, but location of building the same. Office on third floor. First observation taken 8 pm.	
November 1. 1918.	Office moved to New Weather Bureau Building, built from corner 143 rd St. and Ocean Ave. First obs. taken 8 pm.	

Figure 3: Page from the Weather Bureau's Climatological Record
(Courtesy of the Fort Story Public Information Office Collection)

Architecturally, Cape Henry House's three-story exterior is unusual. Its multi-shaded brick walls form curving parapets at the eaves of the hipped roof. The cross-shaped attic floor and roof create four corner terraces from which the weather could be observed. The floor plan has a center hall, double-pile organization, to which a kitchen and a glazed porch are appended. The exterior walls are multi-hued, orange-tone, water-proof brick laid in running bond. The windows are six-over-six, double-hung sash. The three stories rest on a raised cast-in-place concrete basement, which in turn is supported by a huge cast concrete platform. A one-story generator building sited at the rear of the Cape Henry House is constructed in the same brick with a hipped roof. The Cape Henry House property appears to meet the criteria for individual listing on the National Register of Historic Places.

The Lighthouse of 1881

When the Federal Lighthouse Board determined in 1872 that the existing Cape Henry Lighthouse was unsafe "and in danger of being thrown down in some heavy gale," plans were made to replace it. In 1878, Congress appropriated \$75,000, and in 1881, the new 150-ft lighthouse composed of cast-iron plates on a granite base was first illuminated. It stands 327 feet from the 1791 Cape Henry Lighthouse. In 1923, an electric light of 160,000 candlepower was installed. In 1929, the lighthouse became the first radio-distance-finding station in the world. In 1939, the Fifth District of the U.S. Coast Guard took command of the lighthouse. The lighthouse and its associated support buildings are sited in an area designated as a U.S. Coast Guard Reservation. It is one of three remaining active lighthouses of this type (fully cast-iron); it flashes "U" (unwatched) in Morse code at 60,000 Candela (candlepower).

The Cape Henry Syndicate

Like other coastal properties near metropolitan areas, Virginia Beach became increasingly popular as a resort after the Civil War (Figure 4). Railroad development enhanced Virginia Beach's development as a resort city at the turn of the century, and the subsequent, less intense development of Cape Henry. In 1883, developer Colonel Marshall Parks, founder of the Norfolk and Virginia Beach Railroad and Improvement Company, opened rail service between Norfolk and Virginia Beach. Likewise, in 1902, the Chesapeake Transit Company built a railroad to the newly developing Virginia Beach at Seatack on the Atlantic coast. At the same time, a group of Norfolk businessmen formed the Cape Henry Syndicate with the idea of developing the Cape as a resort. The syndicate was a reorganization of The Cape Henry Park and Land Company, which had been chartered in 1890 and had acquired over 5,500 acres at the Cape. A continuous loop of electric railway track operated between the Virginia Beach resort area (centered on 17th Street), Cape Henry, and Norfolk. In 1906, sixteen Norfolk Southern passenger trains made the circuit daily. However, rail use declined in the 1930s and in the decades following the opening of Virginia Beach Boulevard (a.k.a. U.S. Route 58), a concrete road connecting the resort area to Norfolk.

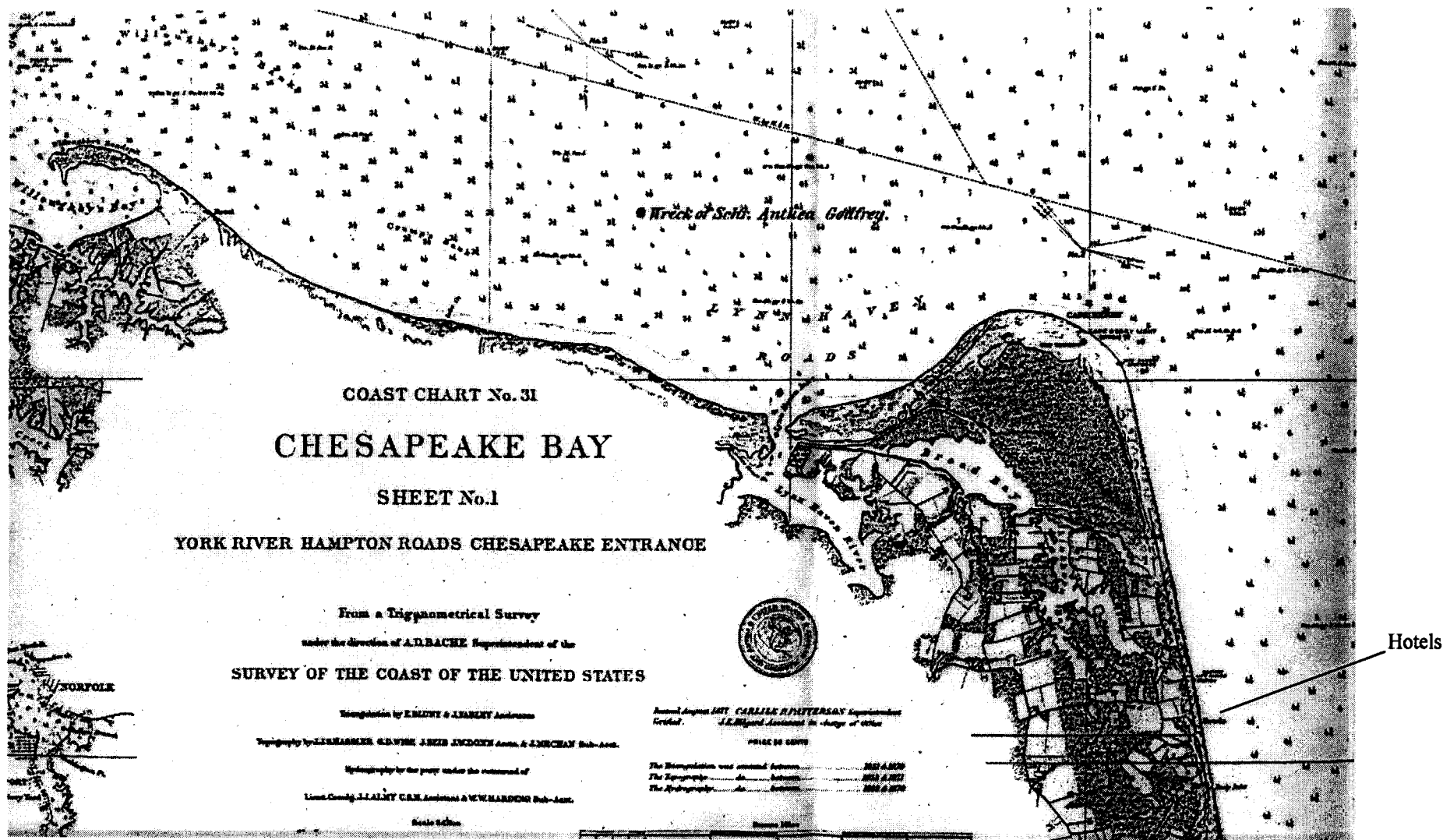


Figure 4. Coast Chart No. 31, 1863 Map (corrected in 1885)
(Note that it shows the beginnings of a resort at Virginia Beach – see “hotels” notation.)
(Courtesy of the Virginia Department of Historic Resources)

Though Cape Henry was historically referred to as “the Desert,” in the sense that it was deserted of inhabitants, in reality it was a port for watermen and seafarers who stopped for provisions from its forests and camped on its beaches. At the dawn of the twentieth century, a group of vacationers and families seeking refuge from the heat and congestion of nearby Norfolk built a few private homes in the Cape Henry area. These frame cottages, along with O’Keefe’s Casino, the Hygeia Cottage for Tourists, a railroad station (see Photo 7, a current photo of the old railroad station) and St. Theresa’s Chapel joined the lighthouses, lifesaving station, and the weather station to form a small community north of Virginia Beach. St. Theresa’s was constructed by William O’Keefe, the casino owner, and it has been the only permanent chapel building on the post since the Army’s taking of the property by eminent domain. Virginia Beach, the nearby resort south of Cape Henry, was incorporated as a town in 1906. Figure 5 depicts the Cape Henry Community from 1902 to ca. 1939.

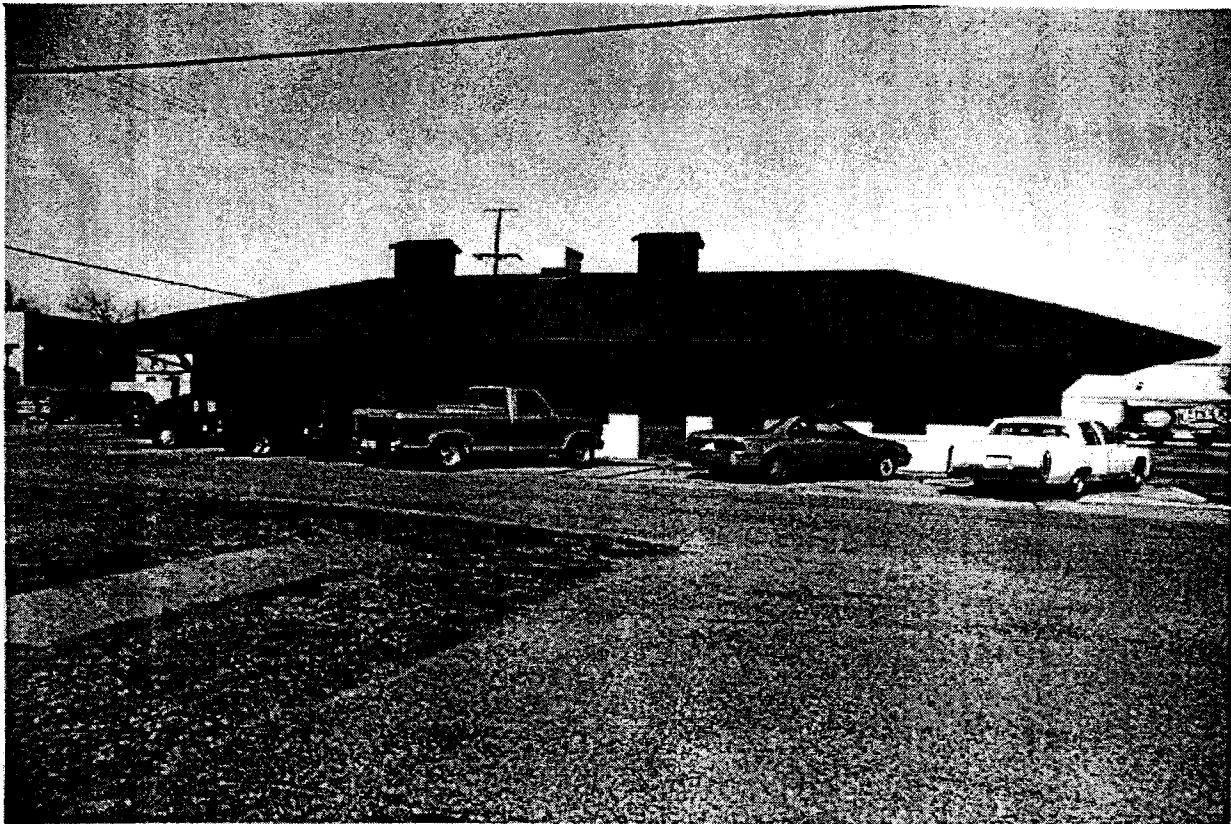


Photo 7: Chesapeake Transit Company Railroad Station, Building 591 (1998)

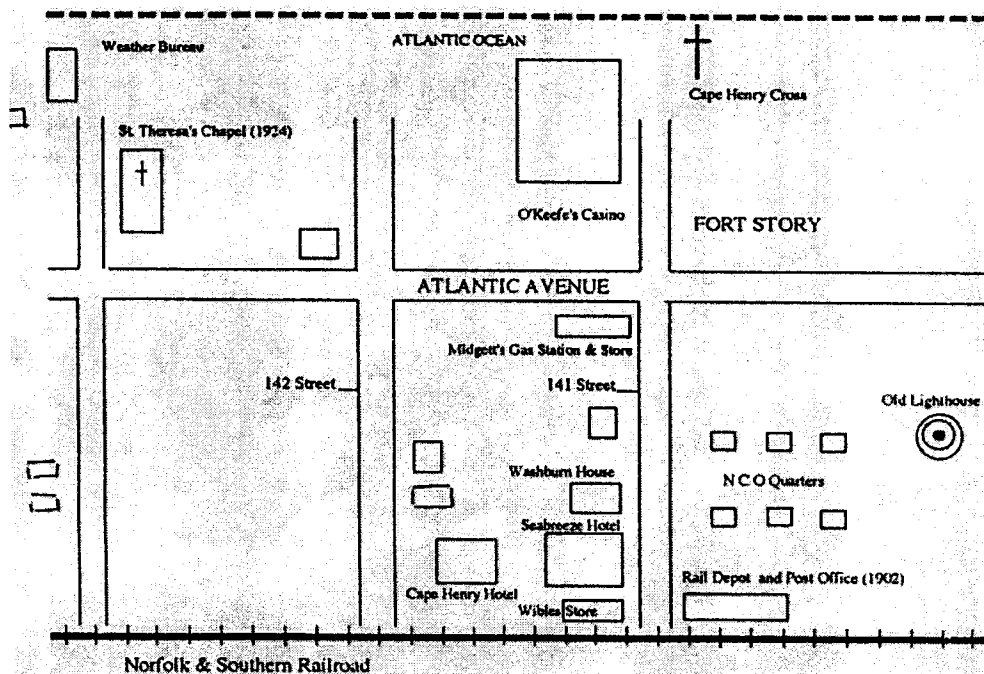


Figure 5. Cape Henry Community 1902-ca. 1939
(Courtesy of the Collection of Mr. Fielding Lewis Tyler)

Fort Story

In reaction to the increasing role the United States was playing on the world stage and the importance of ports and military facilities in the Tidewater area, both national and local figures began thinking seriously about fortifying Cape Henry and the mouth of the Chesapeake Bay. Future president William Howard Taft chaired a board for this study in 1905, and in 1909, he recommended the construction of a fort between the Capes. Popular legend has it that the rotund president was in part inspired by the Lynnhaven oysters on which he had dined at O'Keefe's Casino. Taft arrived at the Chesapeake Transit Company Railroad Station at Cape Henry by special train and used the occasion of his visit to announce his endorsement of a fortification.¹²

In 1913, after a five-year delay, appropriations were made to buy land at Cape Henry to build a fort. The Commonwealth of Virginia ceded 343.1 acres to the United States for the "purpose of erecting fortifications and other military purposes" (Acts of Assembly 1914: 95), beginning a decades-long series of purchases, grants and leases that would comprise the installation. The new facility was named for native Virginian General John Patten Story, Commanding Officer of Fort Monroe from 1902-1904¹³ and a former commandant of the Artillery School. General Story, the author of works on artillery and a developer of range-finding equipment, died in 1915.

¹² Joseph Dunn and Barbara Lyle, *Virginia Beach "Wish You Were Here"* (Norfolk, VA: Donning Company, 1983), p. 29. Fielding Lewis Tyler, *Artillery to Amphibians: the United States Army at Cape Henry, Virginia* (unpublished manuscript made available by the author), p. 1.

¹³ Richard P. Weinert, Jr. and Colonel Robert Arthur, *Defender of the Chesapeake* (Shippensburg, PA: White Mane Publishing Company, Inc, 1989), p. 316.

In February 1917, the 2nd and 5th Coast Artillery Companies arrived to garrison the new fort, which along with Forts Monroe and Wool at Hampton Roads and Fisherman Island opposite at Cape Charles provided the defenses of the Chesapeake Bay. Most of the new post's servicemen were trained at Fort Monroe's Coast Artillery School, "the hub of harbor defense training, research, and development activities."¹⁴ Fort Story's siting mirrored the movement of American defense installations from protected inland sites to coastline fortifications. In Virginia, Fort Monroe, established in 1817, manned the inner defenses, while the modern, outer defenses of the Chesapeake Bay were to be installed and manned at Fort Story. Figure 6 depicts the harbor defenses of the Chesapeake Bay and their relative vicinity to each other.

2.6 World War I (1917-1920)

Given America's late entry into World War I, the initially slow pace of construction at Fort Story was perhaps to be expected. The United States' entry into the war in 1917 accelerated the preparation of actual defensive emplacements, although their construction was clearly recognized as temporary. Several of the buildings constructed during these early years, including the Headquarters Building (Building 300), remain today.

Lieutenant Colonel Daniel W. Ketcham commanded the artillery companies assigned to Fort Story during the period of the war. These soldiers manned the 5- and 6-inch guns emplaced at Cape Henry for the outer defenses of the Chesapeake Bay. It was not until early 1922 that Batteries "A" and "B" were invested with four 16" Howitzers and the Cape was dubbed the "American Gibraltar." In 1940, these two batteries were renamed Battery Pennington and Battery Walke to honor Major General Alexander C. M. Pennington (1838-1917) and Brigadier General Willoughby Walke (1859-1928) of the Coast Artillery Corps.

Batteries Pennington and Walke each consisted of a pair of boomerang-shaped sites. At the apex of each was a circular 16-inch Howitzer gun emplacement (see Photo 8). At the end of each arm leading to the apex was a 12,800 cubic foot concrete shell room, which could hold 80 shells (see Figure 7 and Photo 9). Mid-way along each arm was a 1,575 cubic foot concrete powder magazine with a capacity of 150 charges (see Figure 7 and Photo 10). For each of the paired batteries, a railroad track ran from the interior of the shell magazines, along each side of the powder magazines, to the gun emplacement. Together, Batteries Pennington and Walke provided a capacity for 640 projectiles and 1,200 complete charges.

¹⁴ *Seacoast Fortifications*, p. 48.

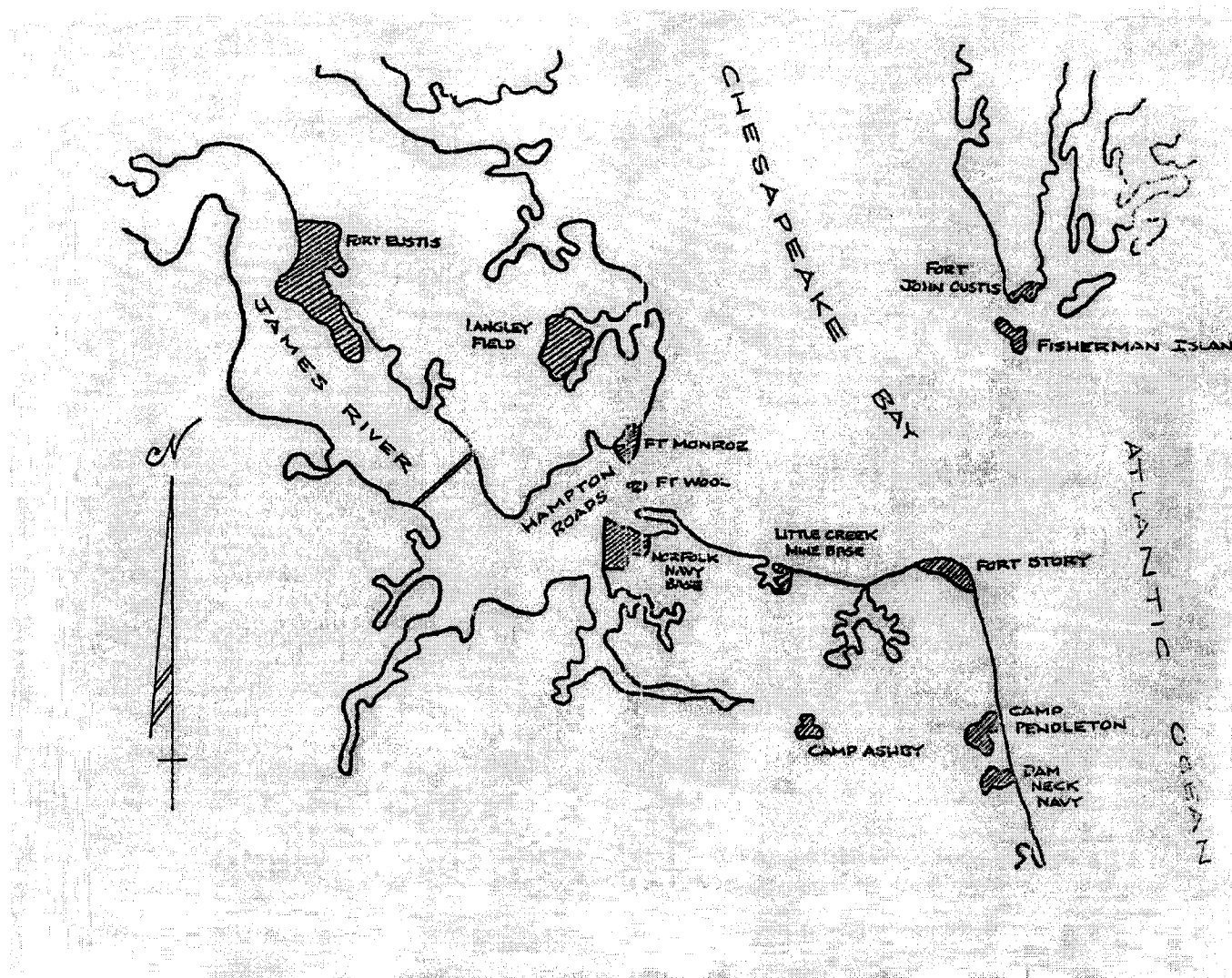


Figure 6: Harbor Defenses of the Chesapeake Bay, 1943.
(Courtesy of the Collection of Mr. Fielding Lewis Tyler)



Photo 8: 16-inch Howitzer and Gun Crew at Battery Pennington (ca. WWII)
(Courtesy of the Casemate Museum, Fort Monroe Photo Collection)

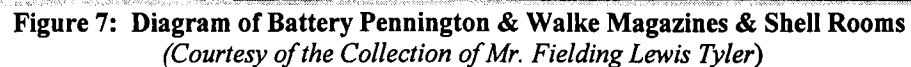




Photo 9: Concrete Shell Room (1998)

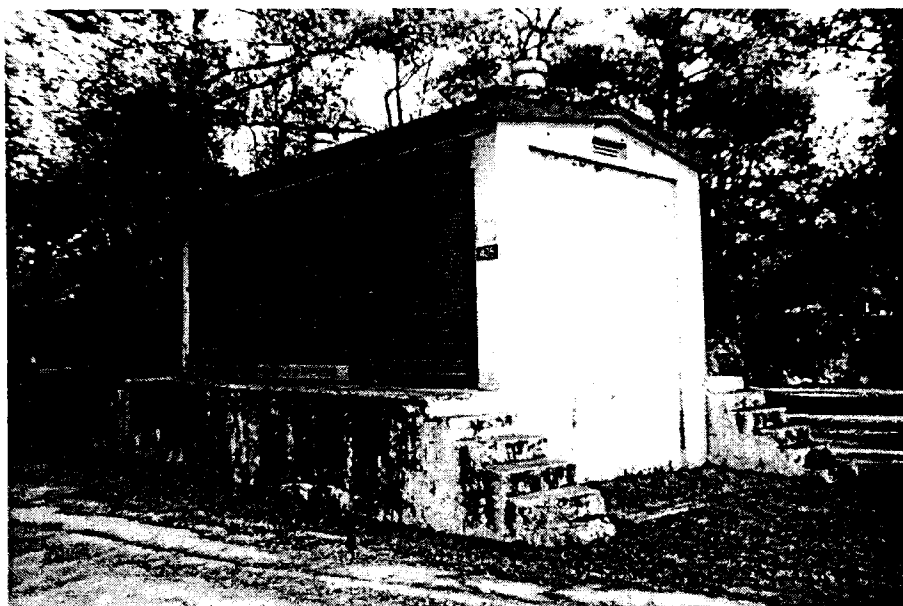


Photo 10: Concrete Powder Magazine (1998)

Most of the buildings comprising Battery Pennington and half of Battery Walke remain intact, though only one of the gun emplacements is visible and a majority of the rail tracks have been removed. A remote plotting room for both batteries was combined with a switchboard in Building 401, a concrete bunker set in the reverse of the secondary dune and connected to Battery Walke by a tunnel.

Other prominent buildings remaining from this early period include the remodeled Post Headquarters (Building 300 – Photos 11 and 12) and the adjacent Engineering Department (Building 301 – Photo 13), both concrete frame structures. The Post Headquarters is distinguished from other post buildings by its symmetry and its broad-hipped roof. The large parade ground centered on its façade results in the Headquarters being the most prominent building on post. The original Post Commander's quarters also remains from this period (Building 587 – Photos 14 and 15). This frame residence, now used for officer's quarters, has a recessed two-tiered front porch. Though vinyl siding and replacement columns and balustrade diminish the building's integrity, it maintains its historic form. This structure, a privately owned cottage prior to the Army's arrival, served as the Commanding Officer's quarters until the late 1960s.¹⁵



Photo 11: Building 300 (1998)

¹⁵ *Wish You Were Here.*

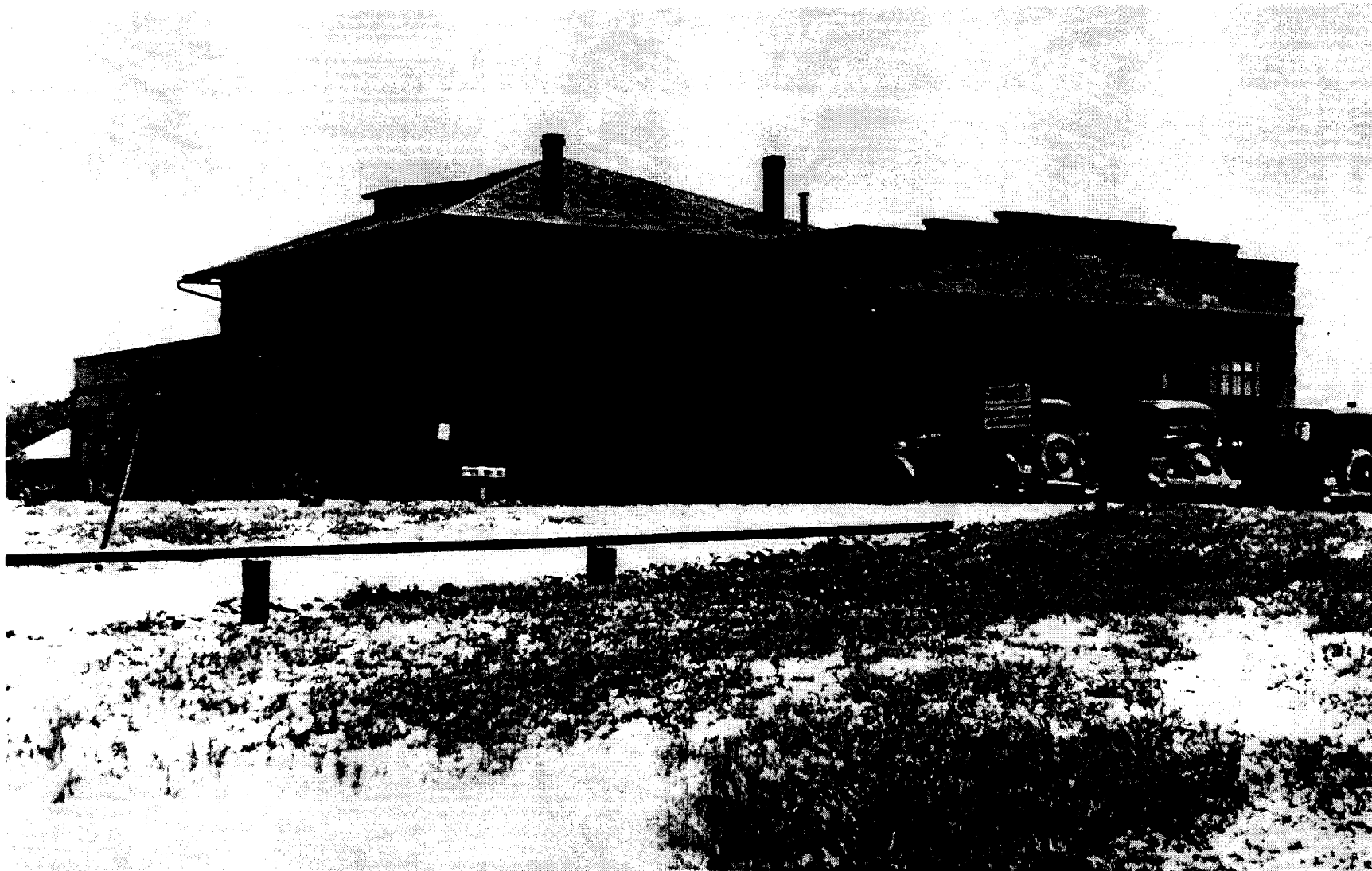


Photo 12: Historic Photo of Post Headquarters – Rear Elevation (date unknown)
(Courtesy of the Fort Story Public Information Office Collection)

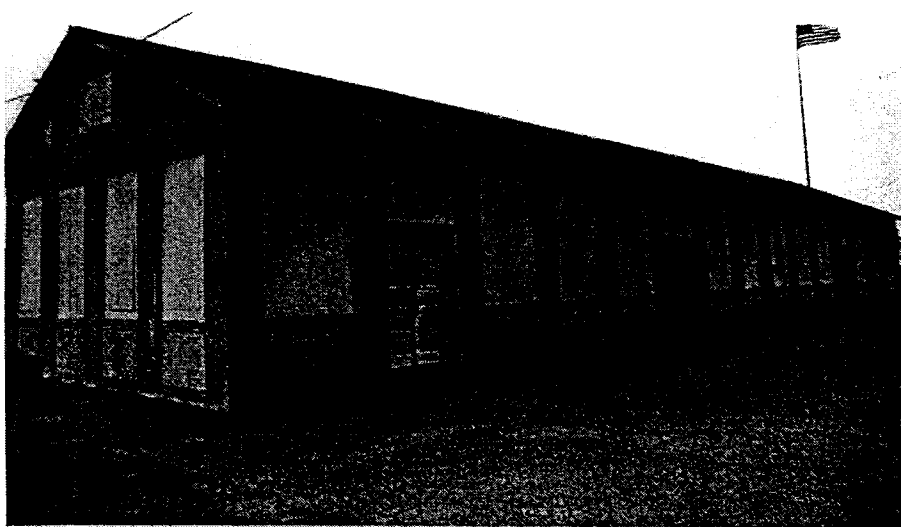


Photo 13: Building 301 (1998)



Photo 14: Building 587 (1998)



Photo 15: Historic Photo of Façade of Former Post Commander's Quarters (date unknown)
(Courtesy of the Fort Story Public Information Office Collection)

2.7 Inter-War Years (1921-1939)

Following WWI, most of the troops departed Fort Story and the temporary armament was dismounted. Into the 1920s and early 1930s, the post garrison consisted of a small caretaking detachment; the troops continued to occupy the WWI-era wood buildings. Construction of permanent defenses and additional facilities were initiated. In support of Battery Pennington, shell rooms, magazines, railway tracks, and observation towers were built.¹⁶ Two mine casemates, Building 538 (Photo 16) and Building 900 (Photo 17) were also built during this period.

As the Depression lengthened in the Inter-war years, Fort Story was the site of government employment initiatives, in addition to, tactical training exercises. The Civilian Conservation Corps assisted Civil Works employees and soldiers in planting pine seedlings and building brush fences to stabilize the large and shifting sand dunes. The Great Depression was a period of troop reductions and under-funded maintenance in the face of deteriorating international relations. "Reduced in 1927 to an authorized strength of only a little more than 118,000 men, the Army was equipped with obsolete and worn-out equipment."¹⁷

Use of Cape Henry's railroad station also slowly diminished. A portion of the train station served for a time as the Cape Henry Post Office. A 1940 installation map indicates that the train station was used as an infirmary.

¹⁶ Fielding L. Tyler, *Artillery to Amphibians*, 1999.

¹⁷ *Defender of the Chesapeake*, p. 256.

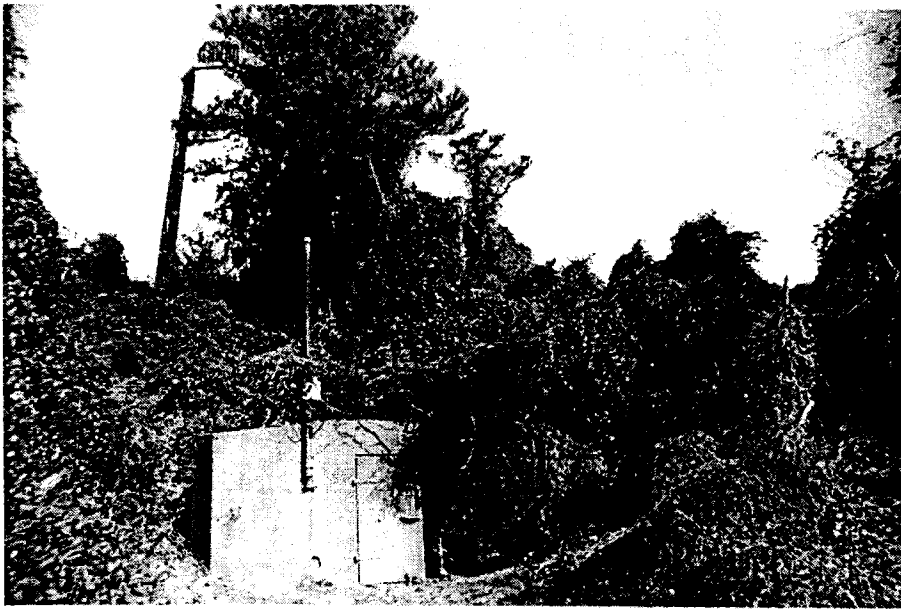


Photo 16: Building 538 (1998)



Photo 17: Building 900 (1998)

2.8 World War II (1940-1945)

As Europe settled into the long siege of World War II, the War Department began an extensive development of Fort Story and other nearby defense installations in the Tidewater area. The small community of cottages, O'Keefe's Casino, St. Theresa's Chapel and the Chesapeake Transit Company's commuter railroad, which had taken root during the Cape Henry Syndicate era, were engulfed by the Army's expansion of Fort Story during the first years of World War II (Figure 8). The total size of the installation had increased from the original cession from Virginia in 1914 of 343 acres to nearly 1,500 acres on the eve of the war. Chief among these later additions was the lease of 694 acres of Seashore State Park in 1940, a move that prompted protests from local citizenry about potential damage to the environment.¹⁸ However, it was clear that fortification at the mouth of the Chesapeake Bay was critical to national defense. In September 1940 the National Guard was mobilized, bringing a welcome influx of soldiers to the Harbor Defenses of Chesapeake Bay.

From 1940 through 1944, Fort Story experienced constant construction, though work was somewhat slowed by the United States' split focus on the European and Pacific theaters. Even the lighthouse was altered in 1940 when the Army placed a glass enclosure on its platform for use as a battery commander's station associated with Battery Walke (Figure 9).¹⁹ The armament at Battery 2 (Pennington) was improved in 1940 when the following temporary batteries were added to complement its howitzers: four 12" railway mortars, four 8" railway guns and four 155 mm guns.²⁰ There were also significant improvements to the telephone and fire protection systems at Fort Story in 1940.

¹⁸ *The Beach*, p. 96.

¹⁹ Unpublished Department of Defense manuscript in the collections of the Fort Eustis Historian's Office, September 1940. Also, Report of Completed Works - Seacoast Fortifications, Form 2, Corrected to November 1, 1941 (collection of Fielding Lewis Tyler).

²⁰ Sheryl N. Hack et al., *Phase I Archeological Survey for Fort Eustis and Fort Story, Cities of Newport News and Virginia Beach, Virginia* (Two volume survey report by MAAR Associates, Inc., Williamsburg, VA, 1989), not paginated.

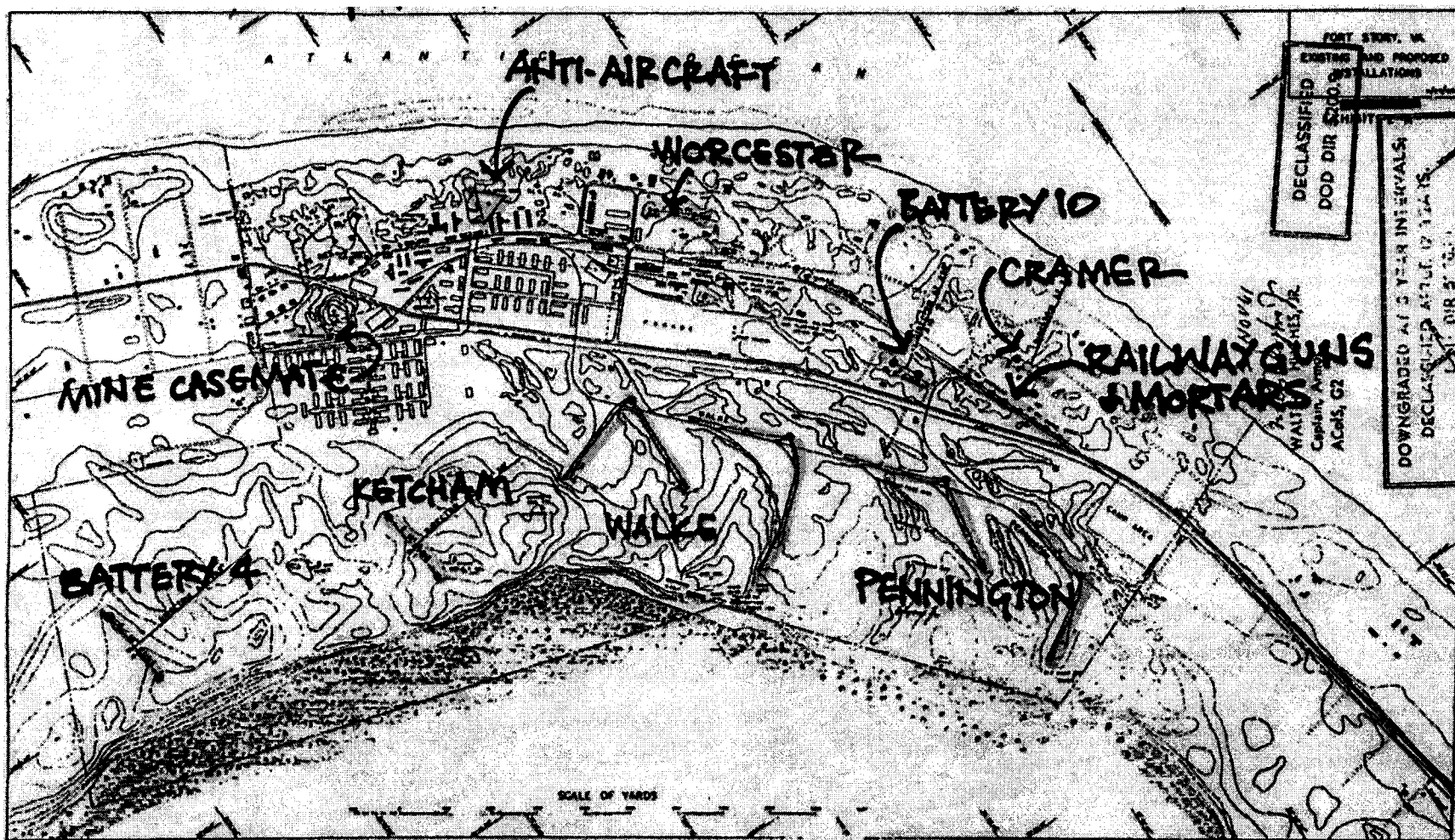


Figure 8: 1940 Map of Existing and Proposed Installations at Fort Story
(Courtesy of the Collection of Mr. Fielding Lewis Tyler)

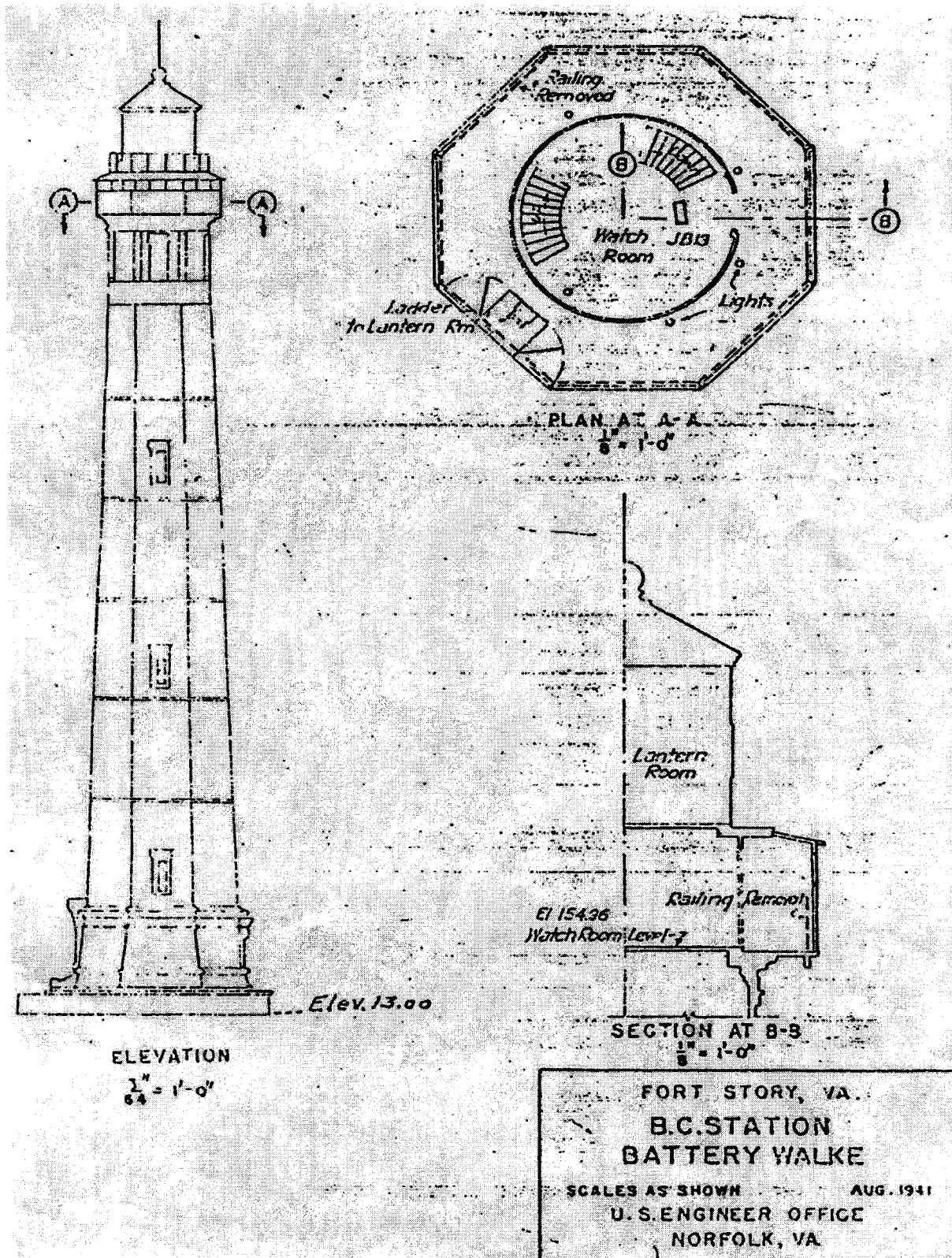


Figure 9: BC Station Battery Walke Lighthouse Modifications
(Courtesy of the Collection of Mr. Fielding Lewis Tyler)

A public service practice took place on June 10, 1941 when 500 dignitaries and press members experienced the first firing of the 16-inch Howitzers since 1928.²¹ However, Fort Story's paired-gun emplacements, which consisted of the four 16-inch Howitzers at Batteries Pennington and Walke, had a range of only 24,540 yards, more than 10,000 yards short of the opening between Cape Henry and Cape Charles (Figure 10).

Brigadier General Rollin L. Tilton, who assumed command of the Harbor Defenses of the Chesapeake Bay in November 1940, despaired that he had neither the guns nor the support to defend the Bay and its resources.²² At the outset of European hostilities, Americans were not concerned about a German attack on the Atlantic coast. However, after the fall of France in June 1940, the United States became intensely aware of its inadequate coastal defense. Harbor defenses were reassessed and the 16-inch gun was adopted as the primary weapon and the 6-inch gun as the secondary weapon in all permanent batteries.

Spaced out along the primary dunes near Fort Story's East Entrance, the three 6-inch batteries -- Battery Worcester (# 6, Building 309 -- Photo 18), Battery Cramer (#5, Building 101 -- Photos 19 and 20), and Battery #10 (Building 317 -- Photo 21) were completed in 1941, 1942, and 1943, respectively. Fort Story's six 6-inch guns had a fifteen mile range and were designed to defend against cruisers and smaller ships. Each of the batteries was similarly constructed with circular gun emplacements flanking a concrete bunker covered in sand and vegetation. The bunkers incorporated storage rooms for shells and powder, as well as plotting and spotting rooms. Building 309, located directly in front of the Post Headquarters (Building 300), had two floors, perhaps because of its strategic location. Building 309 was later expanded with an additional story and a lookout tower. It also housed underwater communications equipment.

The two batteries of 16-inch guns were set back from the beach in the secondary dune line. Both had two mounted 16-inch Navy rifles (MKII & M1) placed at opposite ends of vast casemates with a long north-south axis. The guns were aimed across the dunes perpendicular to the Atlantic coast. The semi-circular gun emplacements were protected by shallow conical roofs. The Army's 16-inch guns had a range of over 25 miles, which could theoretically close the gap between Virginia's two capes. Fort Story's first 16-inch gun battery, Battery #1 (Building 605), was completed in 1942 and named *Battery Ketcham* (Photos 22 and 23) in memory of the installation's first commander, LtCol. D. W. Ketcham. The second of the two batteries, Battery #4, was completed in 1944 and housed in Building 807 (Photo 24). The 16-inch gun batteries under construction at Fort Story were complemented by a battery of 16-inch guns at Fort Winslow, established in 1940 at Kiptopeke, near Cape Charles.²³

²¹ *Defender of the Chesapeake*, p. 266.

²² *Ibid*, p. 263.

²³ Fort Winslow became Fort John Custis in 1942.

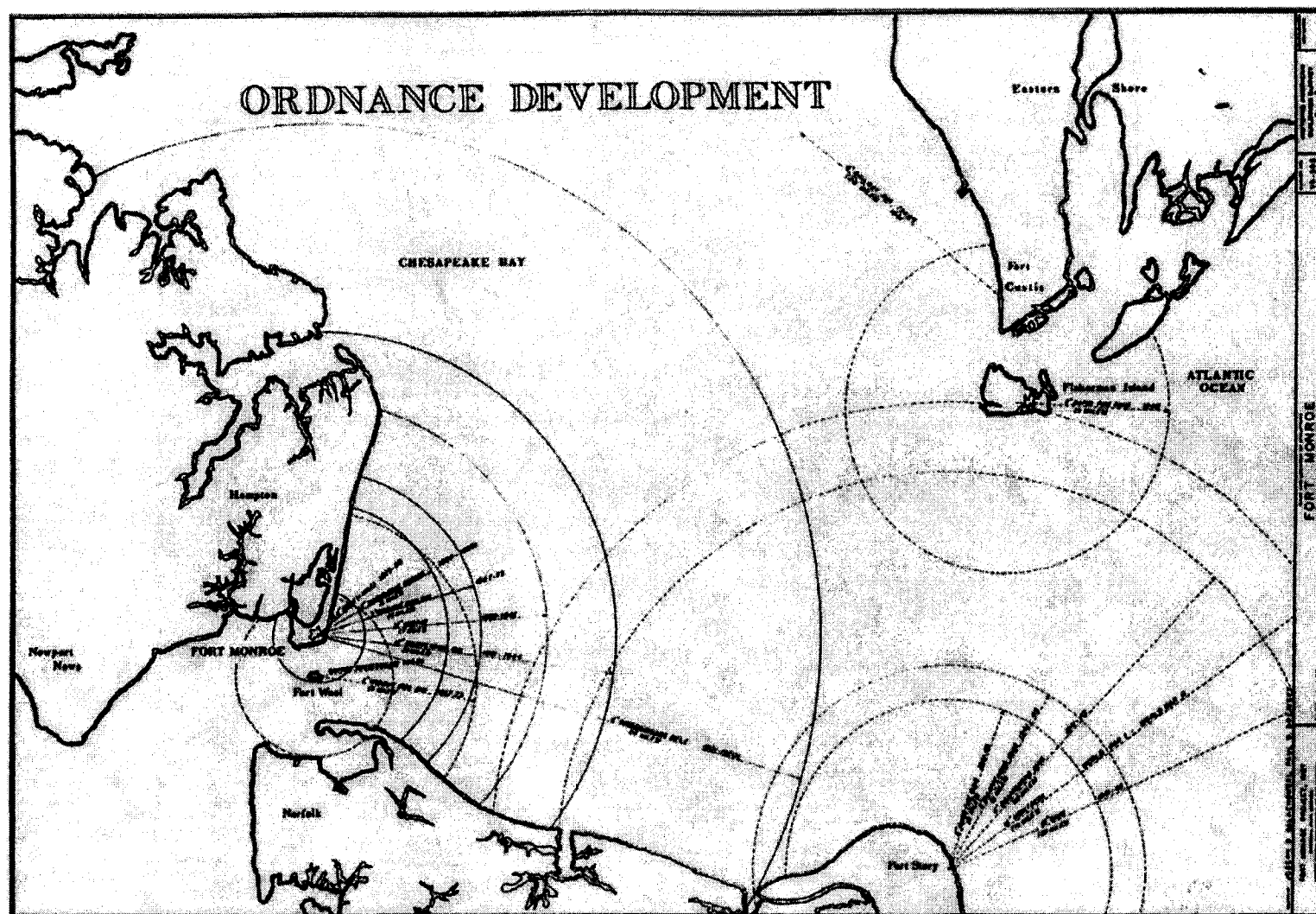


Figure 10: Ordnance Diagram Depicting Range of Fort Story's (and nearby installations') Armament
(Courtesy of the National Park Service, 1987)

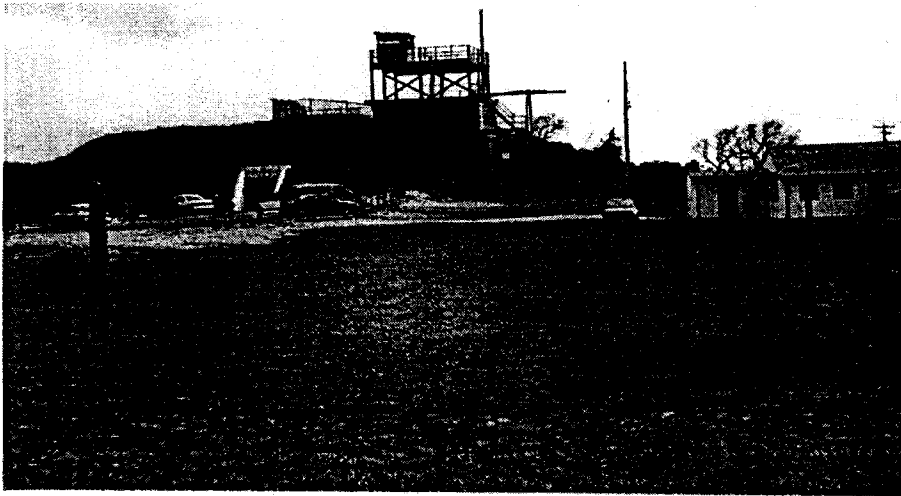


Photo 18: Building 309 – Battery Worchester (1998)

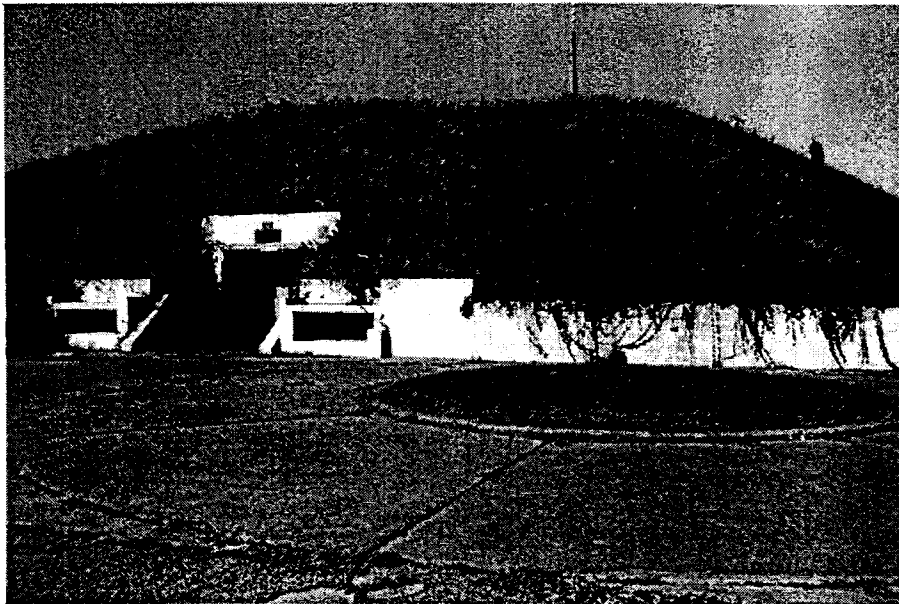


Photo 19: Building 101 – Battery Cramer (1998)

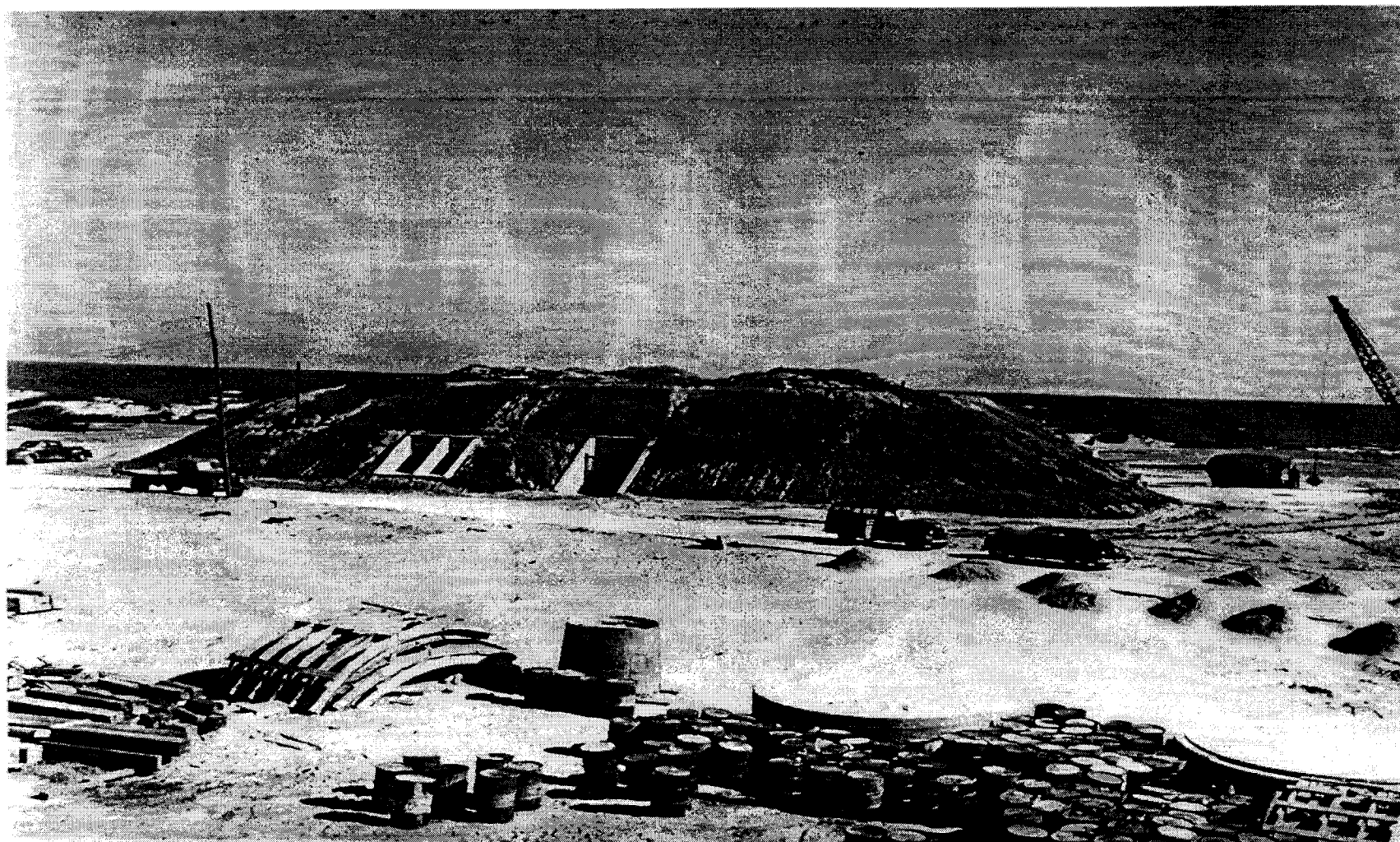


Photo 20: Historic Photo of Construction of Battery Cramer (#5) (October 1942)
(Courtesy of the Fort Monroe Casemate Museum Collection)



Photo 21: Building 317 – Battery #10 (1998)

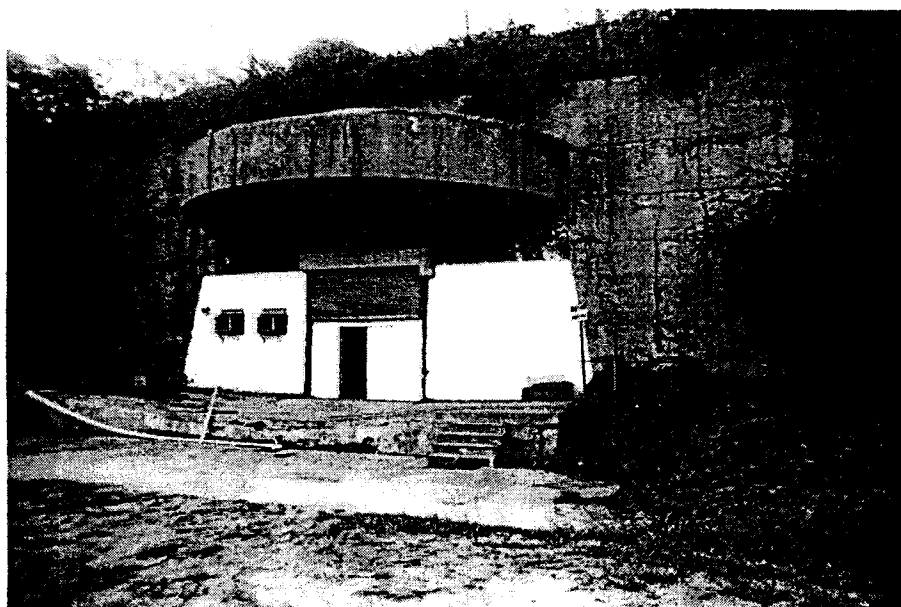


Photo 22: Building 605 - Battery Ketcham (1998)



Photo 23: Historic Photo of Proof Firing Gun #2 from Battery Ketcham (October 1942)
(Courtesy of the Fort Monroe Casemate Museum)



Photo 24: Building 807 (1998)

As with Batteries Pennington and Walke, the 16-inch gun batteries had remote plotting, spotting, and radio rooms - Building 403 (Photo 25) for Battery #1 and Building 809 for Battery #4, completed in 1943 and 1944, respectively. Photo 26 shows the construction of a 16-inch gun at Battery #121 in 1943.



Photo 25: Building 403 (1998)

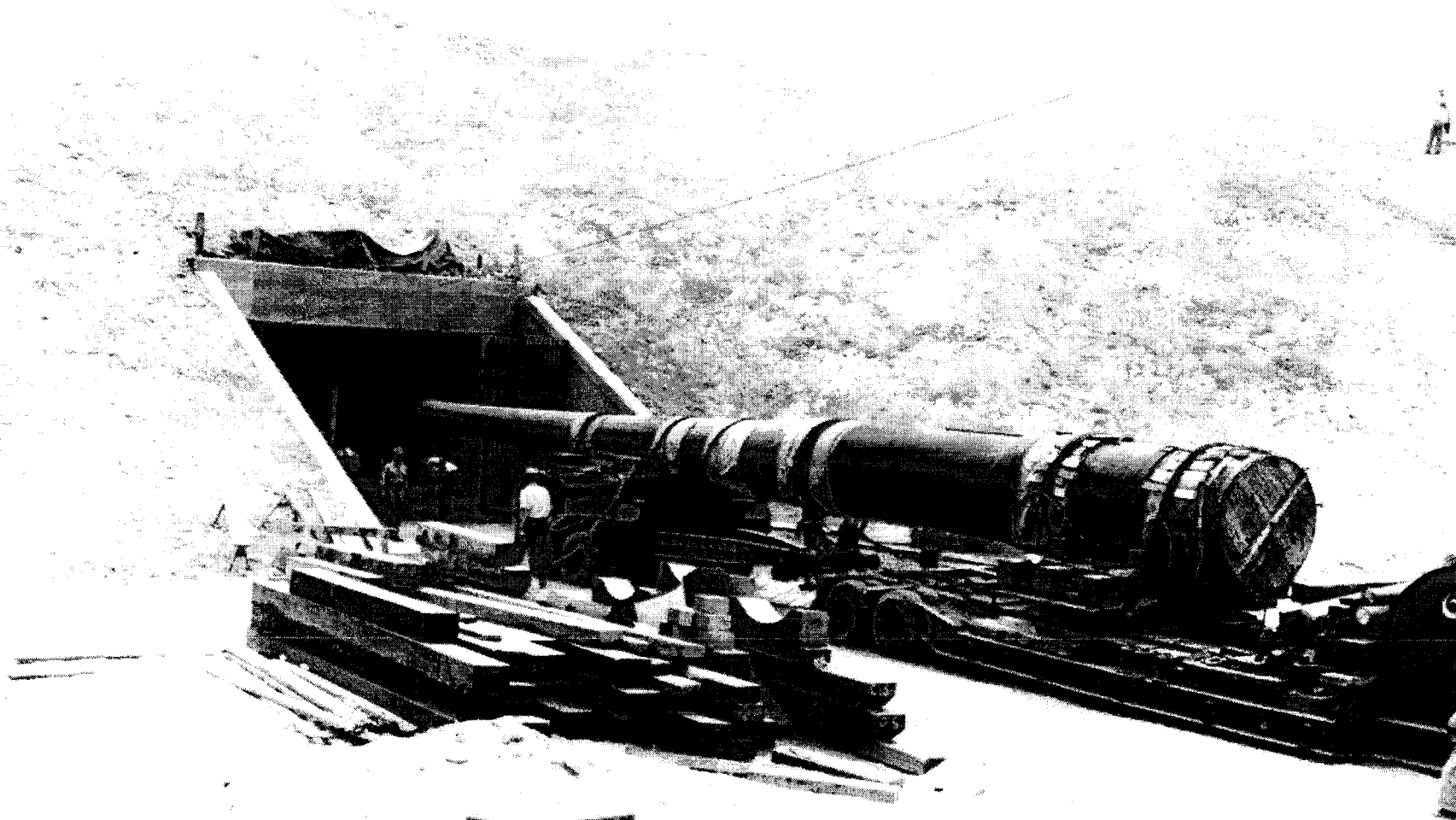


Photo 26: Construction of 16-inch Gun at Battery Number 4 (#121), 1943
(Courtesy of the Fort Monroe Casemate Museum Collection)

In January 1941, the Harbor Defenses of the Chesapeake Bay were headquartered at Fort Story, which was also designated the first Harbor Entrance Control Post.²⁴ As international tensions increased, a permanent harbor defense alert was established May 2, 1941 under General Hugh Drum's orders, resulting in Fort Story operating (along with Fort Monroe) on a twenty-four hour schedule, coordinated with the Navy. Along with the increased armament at Fort Story came an influx of new personnel, necessitating the construction of temporary barracks and support structures. Besides housing for the troops, mess halls, a theater, a chapel, a fire station, Officer and NCO clubs, as well as shops and administration buildings, were built in the early stages of the war. Many of these buildings have since been demolished or substantially altered with new siding, windows, and doors.

By December 1941, there were 3,867 men stationed at Fort Story.²⁵ However, the security of vital American resources in the Tidewater Virginia area and along tributaries of the Chesapeake Bay was far from certain. A majority of Fort Story's batteries were either under construction or in need of improvement during the first year of America's engagement in World War II. Only four days after Japan's devastating attack on Pearl Harbor on December 7, 1941, Hitler and Mussolini declared war on the United States. An inflamed Navy pressured President Roosevelt to focus military resources on the Pacific leaving the Atlantic coast vulnerable.²⁶ Although in the east Americans naively considered the War a distant threat, the enemy in the form of five German U-boats, carrying fourteen to forty-two torpedoes each, arrived on the eastern seaboard in mid-January 1942, a month after war was declared.

Critical to supporting the Allies' war against Germany in the European theater was the shipping of supplies and fuel across the Atlantic. In order to disrupt this vital traffic, Hitler authorized German Admiral Dönitz, Chief of the *Unterseeboot* Fleet, to conduct a reign of terror against freighters, tankers, and other commercial boats, particularly the tankers traveling between the Gulf Coast and Caribbean oil ports and northeastern refineries. Dönitz referred to his mission as *Operation Paukenschlag*, which has the dual meaning of "drum beat" or "thunderbolt." From January through July 1942, Dönitz's campaign to disrupt the vital supply line of oil and other supplies between the Americas and Britain resulted in the loss of 4.7 million tons of Allied boats.²⁷ During the same period, only four German U-boats were sunk in the mid-Atlantic waters. Two American freighters were sunk on June 15, 1942 in broad daylight as Virginia Beach vacationers watched.²⁸

²⁴ Unpublished Department of Defense manuscript in the collections of the Fort Eustis Historian's Office, January 1941. *Defender of the Chesapeake*, p. 270.

²⁵ *Defender of the Chesapeake*, p. 271.

²⁶ David M. Kennedy, "Victory at Sea," *The Atlantic Monthly* (March 1999), p.59.

²⁷ "Victory at Sea," p. 68.

²⁸ *Ibid.*

Although Fort Story monitored marine traffic moving in and out of the Chesapeake Bay through its Harbor Entrance Control Post, its land-based defenses were useless against *Paukenschlag*. Fort Story's underwater defense system was initiated December 8, and the first line of controlled mines were laid at the Capes to defend the Bay's main channel on December 16.²⁹ This minefield, which ultimately had two lines in twenty-two groups of nineteen mines each, was controlled from Fort Story, which had two mine casemates, Building 900 and Building 538. Building 538, which had formerly served as the Harbor Defense Command Post when constructed in 1933, was built in the reverse of the dune on which the old Cape Henry Lighthouse stood (Photo 27). Building 900 was an earlier, arcaded, bunker built in the reverse of the primary dune, at the end of what is now Eniwetok Road. The minefield was usually set on "safe" to allow unimpeded passage of Allied ships and freighters and was set on "contact" in periods of poor visibility or when the commanding officer felt that it was tactically advisable.

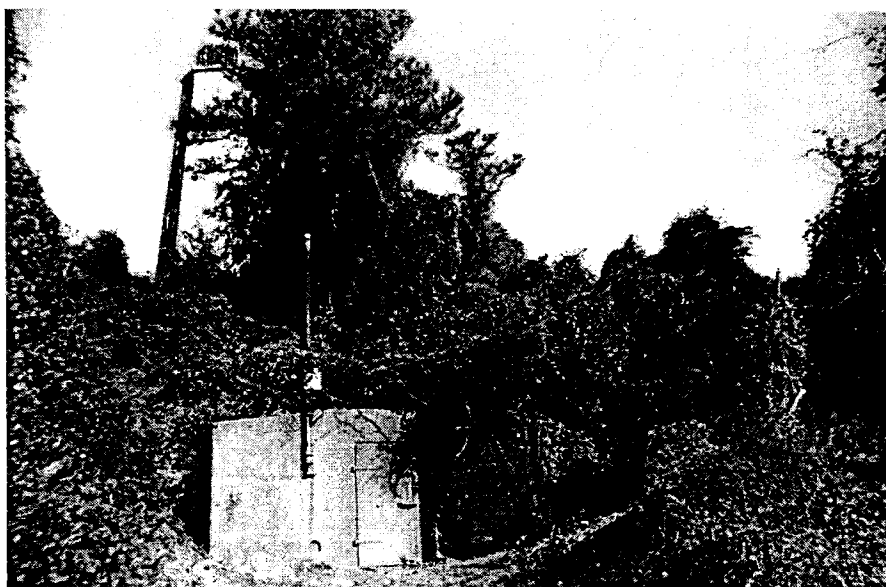


Photo 27: Building 538 (1998)
(Note the lighthouse, nearly directly upslope from Bldg. 538)

Unfortunately, it proved impossible for Harbor Control to maintain effective communication with the busy traffic of domestic and foreign freighters, tankers, small craft, fishing vessels, and other boats. The American tanker, E.H. Blum, failing to respond to radio warnings, struck a mine and sank on February 16, 1942.³⁰ The early mines proved defective in another way: they were buoyant, bobbing about 15 feet below the water's surface, and their lines were easily tangled. A completely new minefield was laid in 1943.³¹ The minefields operated from Fort Story were destroyed in the last months of 1945.

²⁹ *Defender of the Chesapeake*, p. 272.

³⁰ *Ibid*, p. 275.

³¹ *Ibid*, p. 280.

The lag in America's effective defense against submarine attacks on shipping was coupled with civilians' reluctance to acknowledge the reality of the enemy threat. While German U-boat captains easily identified their prey silhouetted against well-lit shores, the Virginia Beach Chamber of Commerce tried to plan a profitable summer season. At the end of March 1942, the month of the heaviest Allied shipping losses off the mid-Atlantic coast, Virginia's Governor Colgate Darden asked that all non-essential lights along the state's beaches be extinguished. Hotels installed heavy black curtains but reluctant guests were responsible for observing black out.³² The Germans referred to the first six months of 1942 as "the happy time" and their quest to destroy shipping along the Eastern Seaboard as "the Atlantic Turkey Shoot." The carnage effected by German U-boats off the coast of Virginia and North Carolina ceased only when Hitler ordered Dönitz to recall the U-boats to mid-Atlantic seas at the end of July 1942.³³

At the end of 1942, after U-boat activity had all but ceased off Cape Henry's shores, the Army decided to station limited service men at Fort Story to replace the coast artillery men who were dispatched overseas. By the end of 1944, Fort Story had 35 guns, two mine casemates (Building 538 and Building 900 - also known as Battery 7-A) and 19 seacoast searchlights. When construction on its 6-inch and 16-inch gun batteries was finally completed in 1944, Fort Story became the most heavily armed defense installation on the mid-Atlantic coast. At roughly the same time, the tide of war had turned in the Allies favor. In September 1944, Fort Story became the site of a convalescent hospital, eventually accommodating over 13,000 patients before its closure in 1945. The temporary hospital buildings have all since been demolished.

The obsolescence of Fort Story's newly improved defense system was rapid. In May 1949, all structures of the Harbor Defenses of Chesapeake Bay were declared surplus.³⁴ In January 1950, the Harbor Defenses of the Chesapeake Bay were discontinued by order of J. Lawton Collins, Secretary of the Army.³⁵ As noted by historian Emanuel Raymond Lewis: "Only after World War II and the appearance of radically new forms of weaponry such as nuclear explosives and guided missiles did the major powers finally abandon the use of conventional coast artillery."³⁶

³² *The Approaching Storm*, p. 21.

³³ "Victory at Sea," p. 71.

³⁴ Unpublished Department of Defense manuscript in the collections of the Fort Eustis Historian's Office, May 1949.

³⁵ Unpublished Department of Defense manuscript in the collections of the Fort Eustis Historian's Office, January 1950.

³⁶ Emanuel Raymond Lewis, *Seacoast Fortifications of the United States* (Annapolis: Naval Institute Press, 1979), p.3.

2.9 The Cold War Era (1946-1989)

Transportation Corps

The advent of The Cold War on the heels of World War II ushered in a change of mission for Fort Story. Its use as a training facility for beach landings (beginning in 1940) became the Fort's primary mission. The same features that made Cape Henry a critical location for coastal defense made Fort Story an excellent training site for shore resupply operations. In 1944, the Fort was designated a subpost of the Army Transportation Center at Fort Eustis for over-the-beach training grounds for landings and logistical resupply. In 1946, the 458th Amphibious Truck Company (DUKW) took up residence. Fort Story was designated as a subpost of the Transportation Corps Training Command at Fort Eustis in 1948. Before the Transportation Training Command was moved to Fort Eustis in 1947, a survey was conducted of potential sites around the country that were suitable to train all types of transportation units. Fort Eustis was selected as the principal training center. It was recognized at the time that Fort Story possessed the necessary qualities to complement Fort Eustis in training amphibious units. Fort Story remains the only Army training center for Logistics-Over the Shore (LOTS) training.

Fort Story has a varied terrain and coastline, allowing the simulation of numerous landing sites around the world. It offers beaches on both the Chesapeake Bay and the Atlantic Ocean with a range of surf and tidal conditions. A temperate climate allows year-round training, and nearby access to deep water allows training in the full range of activities involved in amphibious landings. The post logically became an important and effective testing site for equipment involved in amphibious operations, particularly equipment intended for use in a sand environment.

Its proximity to the entire Tidewater Virginia military complex facilitated the coordination of operations among the various branches of the armed forces (particularly Little Creek Naval Amphibious Base) through the Combined Arms Support Command, Training and Doctrine Command and The Department of the Army. When air and missile attacks replaced naval invasions as the primary threat to coastal security, Fort Story's proximity to the Tidewater Virginia military complex assured its continued role in the nation's coastal defense.

Nike-Hercules Missile Program

In the late 1950s, Fort Story renewed its role in the country's coastal defenses. Because it had been an ideal site for fixed artillery, it became a natural choice for a Nike Missile installation. After initial installations of the first generation of Nike-Ajax missiles in the mid-1950s at Fort Story and at seven other locations in the Norfolk, Virginia area, the Fourth Missile Battalion installed the more advanced Nike-Hercules missiles at Fort Story in 1958 (Photo 28). Battery "B", 4th Missile Battalion, 1st Artillery, a Nike-Hercules Battery, became a tenant agency at Fort Story. The Nike-Hercules missiles, which could carry either an atomic or conventional warhead, were intended to repel a possible nuclear bomber attack by the Soviet Union. Hercules' advances over the earlier Ajax missiles included the ability to operate against larger numbers of higher flying and faster moving aircraft.



Photo 28: Aerial Photo of Nike Missile Launch Area on Fort Story
(Courtesy of the Fort Story Public Information Office Collection)

The missile's booster rocket created a stir among the public, which feared that a discarded booster stage might fall back to earth and crush an innocent victim. Fort Story's coastal location eased the public's concerns about needing a "drop zone" for the missile's booster rocket.

The Nike program at Fort Story had three groups of buildings or structures. A cluster of four, rather bland, one-story, concrete block administration and barracks buildings were grouped not far from the missile launch area (Photo 29). Radars and fire controls supporting the program were sited atop the primary dune along the Chesapeake Bay; these radars have been dismantled and the site is leased to the Marine Corps (Photo 30). The missiles themselves were stored underground in three magazines, sited in a vast launch facility west of Building 807.

Of the 145 Nike Hercules batteries that the Army deployed during the Cold War, 110 were converted from the less developed Nike-Ajax installations. The Nike battery at Fort Story was among this majority. In Virginia, a total of eleven Nike batteries were activated between 1954 and 1958. These batteries protected resources and urban centers in the Tidewater region and Northern Virginia. As the perceived threat in the Cold War changed from bomber attack to missile attack, the effectiveness of the Nike-Hercules program as a defensive measure diminished. On February 4, 1974, the Army ordered all existing US. Nike batteries inactivated and the Fort Story site closed in April 1974. With exceptions in Alaska and Florida, all Nike installations were dismantled by 1975.

The Nike missile launch area at Fort Story appears to be intact and in good condition. The cavernous underground magazines are unchanged, except for the removal of missiles and related equipment. Fort Story's Nike Missile installation was part of a ring of missile defenses installed to protect vital government/industrial transportation and military locations in the Tidewater region.

2.10 End of the Cold War to Present (1999)

Fort Story continues to fulfill its training mission today. It provides the Army with its only site for Logistics-Over-the-Shore training. It trains Active Army, Reserve and National Guard components, as well as Department of Defense and Department of the Army personnel in transportation and deployment methods. Its proximity to other military bases facilitates the development of transportation concepts, doctrine, and materiel, in coordination with other commands and with other branches of the Department of Defense.

Many of the historic fortifications and bunkers at Fort Story continue to be used for storage space, offices, and other tenant uses. The shoreline defenses, particularly the anti-aircraft gun emplacements, and other vacant structures in the primary dunes, are in the greatest danger of being lost due to exposure to salt air and water, erosion, and windblown sand. A majority of the other historic buildings on Fort Story are relatively well maintained because of their ongoing use. The old Cape Henry Lighthouse is maintained as a historic site by the Association for the Preservation of Virginia Antiquities. The new lighthouse continues to be used by the U.S. Coast Guard. Cape Henry House, the historic Weather Bureau, serves as the Commanding Officer's family home. The Chesapeake Transit Company Railroad Station is used as office space. The Cape Henry Memorial, owned by the Department of Interior and maintained by the National Park Service, is a small parcel set aside to commemorate the First Landing of permanent English settlers and the Battle of the Capes in which Admiral de Grasse's fleet helped to secure American independence.



**Photo 29: Former Nike Missile Site
Administration and Barracks Buildings (1998)**



Photo 30: Former Nike Missile Site Radar Location (1998)

3.0 RESEARCH DESIGN

The goal of the study team's investigations was to survey, identify, and evaluate potentially significant architectural resources among Fort Story's permanent buildings. The team's architectural survey and research efforts took place between November 1998 and July 1999. The evaluation of the resources identified was based on application of the National Register of Historic Resources significance criteria, as detailed in National Register Bulletin 15, "How to Apply the National Register Criteria for Evaluation."

The study team conducted a reconnaissance level survey of all permanent buildings over fifty years old, listed on current property records, within the boundaries of the Fort Story installation. Temporary buildings (including buildings designated "temporary" because they are of frame construction) were not included in this investigation, except in a very general sense (by "windshield survey"), with the exception of Building 587, the Former Post Commander's Quarters. This investigation also included structures related to Nike-Hercules Missile Program at Fort Story. Though these structures are less than 50 years old, they were essential features of a missile program integral to the strategic defense systems of the Cold War. It appears possible that the Nike Missile launch area might meet the requirement under National Register Criteria Consideration G that a property might achieve "significance within the past 50 years if it is of exceptional importance."

The purpose of the archival research was to locate primary and secondary documentation of Fort Story's history, before and after its establishment as an Army installation, in order to describe the historic contexts in which Fort Story and Cape Henry have developed over time. This effort began with a search of materials available in the archives of the Virginia Department of Historic Resources (DHR). In particular, DHR has copies of Fort Story survey and cultural resource reports completed by MAAR in the mid-and late-1980s. Virginia's DHR also sponsored, through its cost-share program, a survey of Virginia Beach completed by Frazier Associates in 1992. At Fort Eustis, the property management section provided a print-out of their computerized database of Fort Story's numbered buildings and structures. The database contains information about building square footage, building use, materials, and dates. Fort Eustis' historian maintains files related to Fort Story's history; these were also examined. The Casemate Museum at Fort Monroe maintains fascinating photographic files on Fort Story's batteries.

The Public Information Office at Fort Story houses most of the written and photographic documentation of the Fort's history as a military installation. Thanks to the Public Information Officer, the study team had extensive access to original photographs and other resources. The collection of written, photographic, and graphic data assembled by Fielding Lewis Tyler was the richest source of information related to the bunkers and defense systems installed at Fort Story. In particular, Mr. Tyler provided copies of "Reports of Completed Works," forms used by the Corps of Engineers to characterize seacoast fortifications, for batteries and other defense facilities at Fort Story. These documents describe in minute detail, the configuration and armament of Fort Story's batteries. He also made available an annotated map of Fort Story, detailing historic building uses, based on his decades-long research.

Lastly, the study team used the Internet to search for information concerning the current mission and tenants of Fort Story. Through the Internet, the team also identified excellent sources concerning the Nike Hercules program.

The data gathered in the course of the study team's research was synthesized and chronologically organized. The results of this research and synthesis are presented in the preceding (*Historic Context*) and subsequent (*Survey Findings*) sections.

4.0 SURVEY FINDINGS

In meeting the goal to identify, survey, and evaluate Fort Story's significant buildings, the study team focused on permanent buildings over fifty years old. Temporary buildings were outside the scope of the survey project. The study team consciously including buildings related to the Nike Missile program, which, although built in the late 1950s, have the potential for exceptional significance. This survey of Fort Story resulted in sixty records. Copies of the original field survey forms are included in Volume III. The study team completed one Integrated Preservation Software record (located Volume II, Appendix C) for each of the following:

- ▶ a gun emplacement (a structure related to Battery Pennington)
- ▶ an air field (a landscape marked with a plaque)
- ▶ a cable terminal hut (Building 201)
- ▶ one temporary building (the original Commanding Officer's Quarters)
- ▶ a group of six igloo magazines (buildings)
- ▶ a group of six magazines paired with buttresses (buildings)
- ▶ a Nike-Hercules missile launch area (structure)
- ▶ a group of administration buildings and barracks formerly dedicated to the Nike project
- ▶ a group of buildings formerly dedicated to the Nike radar system
- ▶ a former weather bureau (Building 734, the current Commanding Officer's Quarters)
- ▶ a train station
- ▶ a chapel
- ▶ forty-eight miscellaneous buildings associated with the defense mission

These records document 57 buildings and structures and one site (the gun emplacement for Buildings 216 and 217) that appear to contribute and 13 buildings, landscapes, ruins, and groups of structures that appear not to contribute to the historic contexts central to the significance of Fort Story and Cape Henry.

The pivotal historic theme at Fort Story is that of Military/Defense represented by the bunkers, magazines, military structures, administration buildings, and also by the two lighthouses (which were not surveyed but which lie within the Fort Story boundaries). Other secondary themes are Government/Law/Political, represented by the Cape Henry House (historically the Cape Henry Weather Bureau); religion, represented by St. Theresa's Chapel; and transportation, represented by the Chesapeake Transit Company Railroad Station.

The role played by Fort Story in coastal defense is embodied by a majority of the installation's permanent structures which are more than fifty years old. Exceptions include the train station and St. Theresa's Chapel which are interesting remnants of Cape Henry's brief tenure as a residential community. The train station appears to be individually significant for its part in the development of greater Virginia Beach. Both the Train Station and the Chapel have been brought into use by the Army to meet its mission at Fort Story.

Cape Henry House is significant as a government facility. It was built in 1918 by the Department of Agriculture for the Weather Bureau and only in recent decades became the Post Commander's quarters. The prediction and observation of weather is particularly critical to beach dwellers, and all those who make their living by the sea.

It is essential in evaluating Fort Story's potential historic resources to consider other military properties in the state. The Department of Defense maintains a large number of significant facilities, bases, and installations in the Commonwealth of Virginia. Several facilities are National Historic Landmarks, including Fort Monroe, Fort Myer, Drydock #1 (Norfolk Naval Shipyard), and the Pentagon. Many others have significant properties and historic districts, which are either listed in the National Register of Historic Places or are formally recognized by the Army, Navy, Air Force, or Marines as having historic importance and as being worthy of protection. The Tidewater area of Virginia enjoys the lion's share of the Department of Defense's historic properties, with significant buildings and districts sited in Norfolk, Portsmouth, Virginia Beach, Yorktown, and Williamsburg.

Unique among these properties are the shoreline bunkers and defense structures of Fort Story's shoreline. No other military facility in the state so poignantly dramatizes the development of the Commonwealth, and indeed of the United States, from fragile Colonial outpost established in 1607 to the World Power that emerged at the close of World War II.

The Cape Henry memorial site (with the First Landing Cross), combined with two generations of lighthouses and the military facilities that housed and supported defense systems developed from World War I through the Cold War, can be viewed as a textbook on the defense of this country's shores. Defense facilities at Fort Monroe and Fort Wool complete the gaps in the defense "story," with structures that illustrate state of the art defense systems developed from the early 19th through the early 20th century. Unlike the fortifications at any other installation in Virginia, the World War II era defenses at Fort Story dramatize the importance of military resources in the Tidewater area and the potential vulnerability of America and its Allies in the first years of that conflict.

5.0 EVALUATION

The Fort Story installation contains a potentially eligible historic district with 57 contributing buildings and structures and one contributing site (the gun emplacement for Buildings 216 and 217), which were surveyed as part of this report. In addition to these 57 buildings and 1 site, the following buildings and structures would also contribute to the significance of the historic district: the Cape Henry Lighthouse, a National Historic Landmark, the current lighthouse operated by the U.S. Coast Guard, which has been previously determined to meet National Register Criteria for Evaluation, and the Cape Henry Memorial, owned by the Department of the Interior. All of these buildings contribute to the significance of the historic district. The historic district is significant primarily under National Register Criterion A, because of the role Cape Henry and Fort Story have played in U.S. coastal defense.

No other military installation in the state is endowed with a collection of World War I, World War II, and Cold War era defense structures and gun emplacements representing this level of gun power or integrity. The two lighthouses at Fort Story should also be considered as defense structures because they functioned in that regard historically. The old Cape Henry Lighthouse was a lookout point for pirates and foreign ships as well as a beacon. During World War II, the new lighthouse was altered to incorporate a battery command lookout. The firepower installed at Cape Henry by the end of 1944 exceeded that of any other mid-Atlantic seacoast fortification. The Nike Hercules program, which operated at Fort Story from 1958 to 1974 (when the Strategic Arms Limitation Treaty (SALT) ended the Nike program), completed the evolution of coastal defenses at Fort Story.

The potentially eligible historic district would incorporate the Cape Henry Lighthouse, the new lighthouse, the Cape Henry Memorial, and permanent structures associated with coastal defense. These permanent structures include the following, organized by period of development. The buildings are briefly described where necessary for clarification:

The Progressive Era (1890-1916)

ca.1902 - Building 591 - Chesapeake Transit Company Railroad Station: The railroad station is individually eligible because of its role in the development of Virginia Beach as a resort city. The station preceded the development of roads at the north end of Virginia Beach. It was from this station that President Taft made his 1909 visit to O'Keefe's where he announced his support for establishing a military installation at Cape Henry. Closed as a railroad station in the 1930s, the building continued to be used by the Army at Fort Story, variously as an infirmary and as office space.

World War I (1917-1920)

ca.1917 - Building 587 - Original Commanding Officers Quarters

ca.1918 - Building 300 - Post Headquarters

ca.1918 - Building 301 - Engineering Department

ca.1918 - Building 734 - Weather Bureau (Cape Henry House, Commanding Officer's Quarters)

Inter-War (1921-1939)

- ca. 1921 - Building 542 - Antiaircraft Battery #1 (modified and rebuilt in 1943)
- ca. 1922 - Buildings 214, 215, 216, 217, 219, 220, 221, 224 (1924), 409, and gun emplacement - Battery Pennington
- ca. 1922 - Building 401 - Plotting and spotting room and tunnel for Batteries Pennington and Walke and Radio Station (1930)
- ca. 1922 - Buildings 405, 406, 410, and 412 - Battery Walke
- ca. 1922 - Building 900 - Mine Casemate #900 (Battery 7-a)
- ca. 1924 - Building 701 - St. Theresa's Chapel - This chapel was built by William O'Keefe, the owner of the Casino at Cape Henry. St. Theresa's is the only permanent chapel at Fort Story.
- ca. 1926 - Building 544 - Antiaircraft Battery supply building
- ca. 1926 - Building 545 - Antiaircraft Battery supply building
- ca. 1926 - Building 546 - Antiaircraft Battery supply building
- ca. 1929 - Building 418 - Meteorological Station
- ca. 1933 - Building 538 - Mine Casemate #1
- ca. 1933 - Building 921 - Bunker/Observation Building
- (ca. 1933 - Building 727 - Post Engineer Building. Listed in the property records as a 1959 structure, but it may have been privately constructed and transferred to the Army. Therefore, may warrant further investigation.)
- ca. 1942 - Building 419 - Harbor Defense Command Post

World War II (1940-1945)

- ca. 1940 - Building 1105 - switchboard/cable hut
- ca. 1941 - Buildings 203, 204, 205, 206, 207, and 208 - Igloo magazines
- ca. 1941 - Building 309 - Battery # 6 ("Worcester")
- ca. 1941 - Building 550 - Cold Storage Warehouse
- ca. 1941 - Building 1202 - Indoor Range
- ca. 1942 - Building 101 - Battery #5 ("Cramer")
- ca. 1942 - Building 704 - Battery #21 (now Harbor Master)
- ca. 1942 - Building 920 - Observation Tower
- ca. 1942 - Examination Battery (not among the numbered buildings and not surveyed)
- ca. 1943 - Building 317 - Battery #10
- ca. 1943 - Building 403 - Plotting, spotting and radio room for Battery #1
- ca. 1943 - Building 605 - Battery #1 ("Ketcham")
- ca. 1944 - Building 807 - Battery #4
- ca. 1944 - Building 809 - Plotting room for Battery #4
- ca. 1944 - Buildings 1093, 1094, 1095, 1096, 1097, 1098 - Magazines with blast walls

Cold War (1946-1989)

- ca. 1958 - Buildings 837, 839, 841 - Nike-Hercules Missile launch area

Non-contributing Buildings

The following buildings, though over fifty years old or associated with the Nike program, are considered non-contributing because of loss of integrity:

- Building 100, East Gate (1942 structure significantly altered in the past decade)
- Building 1100, West Gate (1942 structure significantly altered in the past decade)
- Building 201, 1930 cable terminal hut
- Building 590, Credit Union (significantly altered ca. 1917 structure)
- Building 753, Flammable Storage Building
(significantly altered, insignificant, 1942 structure)
- Building 908, Heat Plant Building
(this building heats a small group of houses, not the entire post)
- Building 1102, Officer's Club (significantly altered and expanded 1942 structure)
- Building 1075, US Army Reserve Center (significantly altered 1942 structure)
- Building 1077, School of Music (significantly altered 1942 structure)
- Building 1078, Gymnasium (currently U.S. Navy Explosive Ordnance Disposal)
(significantly altered and expanded 1942 structure)
- Building 1080, US Army Reserve Center (significantly altered 1941 structure)

Nike Radar Site (currently the US Marine Corps Amphibious Reconnaissance School):

This compound of buildings, ca. 1958, was formerly the site of the Nike-Hercules radars. The radars have been removed from the property. Therefore, the group of buildings no longer convey their historic association with the Nike-Hercules program.

Nike Administration Site:

This group of four one-story concrete block buildings, ca. 1958, formerly held the administration, barracks, and mess hall for Battery B, 4th Missile Battalion, 1st Artillery, which manned the Nike-Hercules Anti-Aircraft Artillery Battery. The buildings currently house a Fort Story tenant. They are not exceptionally significant.

The post includes many frame structures, all of which are considered "temporary" buildings. Groups of typical World War II temporary buildings, now altered with new roofing, cladding, and skirting remain in two clusters. Frame cottages remain from the early years of Fort Story. Several of these structures were acquired from the civil population via eminent domain when Fort Story expanded in 1940. These buildings were not surveyed for this report.

Two of the 57 buildings in the historic district, Cape Henry House, the Commanding Officer's Quarters (Building #734) and the Chesapeake Transit Company Railroad Station (Building #591) individually meet the National Register Criteria for Evaluation. The railroad station, built in 1902, brought passengers (tourists and residents) from Norfolk to Cape Henry three years before Virginia Beach was incorporated as a town.

The railroad station meets Criterion A because of its association with this critical phase in the development of Virginia Beach. Cape Henry House, constructed in 1918 as a weather bureau, is eligible under National Register Criterion A because of its role in marine weather observation and recordation and Criterion C because of its unique architectural features.

Fort Story's remarkable defense structures are scattered throughout the post and are co-mingled with non-contributing structures. This diminishes the integrity and legibility of the historic buildings (which were designed to be camouflaged by the dunes and by indigenous vegetation). Unlike traditional architectural resources, the bunkers and batteries of Fort Story require mapping and interpretation for appreciation and understanding. The overriding significance of the contributing structures is that there is no other military installation that matches the extraordinary history and features of Fort Story - site of the First Landing, the country's first lighthouse, and, during World War II, Headquarters of Harbor Defenses of the Chesapeake Bay and the first Harbor Entrance Control Post.

6.0 SUMMARY OF FINDINGS AND TABLE OF BUILDINGS AND STRUCTURES

What are the Historic Properties at Fort Story?

Within Fort Story there is an “eligible” historic district which includes 57 significant structures and 1 significant site. This potential historic district meets the criteria for listing on the National Register of Historic Places because of the role Fort Story played in national defense and because of Cape Henry’s place in Virginia’s history and is based on the following findings:

- A majority of the significant structures are concrete buildings, bunkers, batteries, and magazines built from 1918 (when Buildings 300 and 301 were built) to 1949, just prior to when the Chesapeake Bay Sector of the Harbor defenses was inactivated.
- At least two older buildings, the train station (Building 591) and the Commanding Officer’s Quarters (Cape Henry house, Building 734) would be considered “eligible” for individual listing as historic properties because of their additional significance in local history.
- The 1958 Nike missile launch area is included among the significant buildings because it represents the last of the defense structures installed at Fort Story. This area illustrates an important defense system developed during the Cold War.
- A majority of the buildings listed as *probably not significant* (Table 1) were designated as “temporary buildings” on the Army’s property records, though a group of these buildings were early cottages within the Cape Henry development, which were privately built prior to and after a garrison was established at Fort Story. Under a 1986 nation-wide programmatic agreement the DOD may demolish World War II temporary buildings. However, this agreement does not address World War I temporary buildings. The study team’s scope of work did not include buildings that were designated as temporary structures; however, they are included in Table 1 to provide an overall picture of Fort Story for planning purposes.

Why are the Current Findings Different from an Earlier Fort Story Survey?

The aforementioned mid-1980s survey by MAAR Associates indicated that less than one dozen properties at Fort Story might be considered significant. Since the mid-1980s, buildings of the World War II era passed the half century mark in age and the Cold War entered into history. Consequently, hundreds of thousands of buildings owned by the Department of Defense have been evaluated and re-evaluated. Many permanent World War II era properties, and a number of Cold War era properties, have been determined to be historically significant.

What is Section 106?

Section 106 of the National Historic Preservation Act of 1966, as amended, requires that the Army give the Advisory Council on Historic Preservation an opportunity to comment on undertakings that might affect historic property. Typically, this means when a project affects a significant building that the Army must consult with the State Historic Preservation Office, so effects to significant features of the historic property can be minimized or eliminated.

What Impact Does Section 106 have on Fort Story?

1. Restrictions on typical repair and maintenance activities are minimal, although the Army (TRADOC) may choose to issue guidelines directing responsible parties to conduct maintenance and repair in order to preserve and protect historic properties. Section 110 recommends that Federal Agencies complete such guidelines.
2. The ongoing use of historic buildings is encouraged as active use encourages preservation (versus demolition) of those buildings.
3. Demolition of historic property must be preceded by consideration of alternatives, by extensive negotiation, and often by drafting and executing a memorandum of agreement with the State Historic Preservation Office and with the Advisory Council on Historic Preservation which spells out one or more mitigations which the Army will undertake. The Army may demolish World War II temporary buildings without consultation.
4. The presence of historic structures and buildings should not preclude future development at Fort Story, if the proposed undertaking is developed with a clear understanding of preservation requirements. Consultation with the State Historic Preservation Office would be recommended and if demolition of historic buildings was included in any development plans, the Army would likely need to draft and execute a Memorandum of Agreement.

The Summary Table

Table 1 provides a breakdown of the buildings and structures at Fort Story according to their relative historic significance. The list is arranged chronologically by building number. Be aware that this list does not include property owned by the National Park Service, the U.S. Coast Guard, or the Association for the Preservation of Virginia Antiquities.

The table is coded as follows:

- Red (R) - historically significant
- Magenta (M) - probably not historically significant
- Green (G) - not historically significant.

In summary, there are 57 buildings/structures and 1 site (the gun emplacement for Buildings 216 and 217) that are significant (Red), 108 buildings that are probably not significant (Magenta) although they are more than 50 years old or Nike-related, 120 buildings that are not historically significant (Green), and 1 building (Building 543) that was not located (therefore, no color code could be assigned).

Map 1 of Volume II, Appendix D is a visual representation of Fort Story's facilities and their relative historic significance, as classified in Table 1.

TABLE 1
FORT STORY, VA
LIST OF BUILDINGS AND RELATIVE HISTORIC SIGNIFICANCE

Red (R) - historically significant, Magenta (M) - probably not historically significant, Green (G) - not historically significant.

Bldg. No.	Date Built	Significance Code	Historic/ Current Use	Why or Why Not Significant
100	1942	G	Gate	No integrity
101	1942	R	Battery	WWII coastal defense Battery #5, "Cramer," 2-6" guns
102	1987	G	US Navy	<50 years old
201	1930	R	Cable Terminal Hut No. 1	WWII coastal defense - Battery Pennington
203	1944	R	Igloo Magazine	WWII coastal defense
204	1944	R	Igloo Magazine	WWII coastal defense
205	1944	R	Igloo Magazine	WWII coastal defense
206	1944	R	Igloo Magazine	WWII coastal defense
207	1944	R	Igloo Magazine	WWII coastal defense
208	1944	R	Igloo Magazine	WWII coastal defense
214	1922	R	Powder Magazine	Coastal defense Gun #2, "Pennington," 2-16" Howitzers
215	1922	R	Powder Magazine	Coastal defense Gun #2, "Pennington," 2-16" Howitzers
216	1922	R	Powder Magazine	Coastal defense Gun #2, "Pennington," 2-16" Howitzers
NA (a site)	1922	R	Gun Emplacement	Coastal defense Gun # 2,, "Pennington," 2-16" Howitzers
217	1922	R	Powder Magazine	Coastal defense Gun #2, "Pennington," 2-16" Howitzers
219	1922	R	Shell Magazine	Coastal defense Gun #2, "Pennington," 2-16" Howitzers
220	1922	R	Shell Magazine	Coastal defense Gun #2, "Pennington," 2-16" Howitzers
221	1922	R	Shell Magazine	Coastal defense Gun #2, "Pennington," 2-16" Howitzers
224	1924	R	Generator House	Coastal defense Gun #2, "Pennington," 2-16" Howitzers
225	1989	G		<50 years old
300	1918	R	Post HQ	HQ 1918 to Present

Table 1 (Continued)

Bldg. No.	Date Built	Significance Code	Historic/ Current Use	Why or Why Not Significant
301	1918	R	Engineering dept.	Coastal defense
303	1988	G	Child Development Ctr	<50 years old
304	1941	M		Temp
307	1993	G	Child Development Ctr	<50 years old
309	1941	R	Bunker	WWII coastal defense Battery #6, "Worcester," 2-6" guns
310	1954	G		<50 years old
312	1941	M	Officers' Mess	Temp
316	1953	G		<50 years old
317	1943	R	Battery	WWII coastal defense Battery #10, 2-6" guns
319	1958	G	Housing	<50 years old
320	1958	G	Housing	<50 years old
321	1958	G	Housing	<50 years old
322	1958	G	Housing	<50 years old
323	1958	G	Housing	<50 years old
324	1958	G	Housing	<50 years old
325	1958	G	Housing	<50 years old
326	1958	G	Housing	<50 years old
327	1958	G	Housing	<50 years old
328	1958	G	Housing	<50 years old
329	1958	G	Housing	<50 years old
401	1923/ 1930	R	Switchboard/ Plotting Room and Tunnel	1) Plotting Room for Batteries "Pennington" and "Walke," 1923 (remodeled 1930) 2) Underground Tunnel used by "Pennington" and "Walke," 1923 3) A Radio Station Built in 1930
403	1943	R	Plotting, Spotting, and Radio Room	WWII coastal defense Battery #1, "Ketcham," 2-16" guns
404	1951	G		<50 years old
405	1922	R	Magazine	WWII coastal defense Gun #3, "Walke," 2-16" Howitzers

Table 1 (Continued)

Bldg. No.	Date Built	Significance Code	Historic/ Current Use	Why or Why Not Significant
406	1922	R	Magazine	WWII coastal defense Gun #3, "Walke," 2-16" Howitzers
409	1922	R	Shell Magazine	WWII coastal defense Gun #2, "Pennington," 2-16" Howitzers
410	1922	R	Shell Magazine	WWII coastal defense Gun #3, "Walke," 2-16" Howitzers
412	1944	R	Shell Magazine	WWII coastal defense
418	1929	R	Meteorological Station	WWII coastal defense
419	1942	R	Harbor Defense Command Post	WWII coastal defense
430	1944	G	Wastewater Treatment	Small, isolated service building
431	1916	G	Garage	Temp
433	1989	G	Equipment Facility	<50 years old
439	1958	G	Housing	<50 years old
440	1958	G	Housing	<50 years old
441	1958	G	Housing	<50 years old
442	1958	G	Housing	<50 years old
443	1958	G	Housing	<50 years old
444	1958	G	Housing	<50 years old
445	1958	G	Housing	<50 years old
446	1958	G	Housing	<50 years old
447	1958	G	Housing	<50 years old
448	1958	G	Housing	<50 years old
449	1958	G	Housing	<50 years old
450	1958	G	Housing	<50 years old
451	1958	G	Housing	<50 years old
452	1958	G	Housing	<50 years old
453	1958	G	Housing	<50 years old
454	1958	G	Housing	<50 years old
455	1958	G	Housing	<50 years old
456	1958	G	Housing	<50 years old

Table 1 (Continued)

Bldg. No.	Date Built	Significance Code	Historic/ Current Use	Why or Why Not Significant
457	1994	G	Youth Center	<50 years old
500	1942	M	Chapel	Temp
503	1941	M	Religious Ed.	Temp
504	1941	M	Thrift Shop	Temp
508	1941	M		Temp
509	1916	M		Temp
514	1950	G		<50 years old, Temp
522	1950	G		<50 years old, Temp
529	1941	M		Temp
530	1941	M	Library	Temp
533	1941	M		Temp
534	1950	G		<50 years old, Temp
538	1933	R	Mine Casemate	WWII coastal defense Mine Casemate 1
540	1916	M		Temp
541	1944	M		Buried, Ruins
542	1921/ 1943	R	Antiaircraft Gun Emplacement	WWII coastal defense Remnants of Battery AA #1, 3-3" AA
543	1943		WWII coastal defense Related to (3) 3" AA	Buried ruins? Not located, therefore no color code assigned
544	1926	R	AA Storehouse	WWII coastal defense Related to (3) 3" AA
545	1926	R	AA Storehouse	WWII coastal defense Related to (3) 3" AA
546	1926	R	AA Storehouse	WWII coastal defense Related to (3) 3" AA
550	1941	R	Cold Storage Warehouse	WWII Coastal Defense
552	1941	M		Temp
587	1916	M	Quarters	Original CO's quarters; Preceded Ft Story; However, temp building
590	1917	G	Credit Union	Loss of integrity
591	1902	R	Train Station	VA Beach history, individually significant

Table 1 (Continued)

Bldg. No.	Date Built	Significance Code	Historic/ Current Use	Why or Why Not Significant
601	1980	G		<50 years old
605	1943	R	Battery/leased	WWII coastal defense, Battery #1, "Ketcham," 2-16" guns
608	1993	G	Magazine	<50 years old
609	1993	G	Magazine	<50 years old
610	1993	G	Magazine	<50 years old
638	1960	G	Power Plant	<50 years old
649	1988	G	Clinic	<50 years old
651	1992	G	Wastewater Treatment	<50 years old
674	1922	R	Shell Magazine (toilets)	WWII coastal defense Gun #3, "Walke," 2-16" Howitzers
700	1990	G	Fire Station	<50 years old
701	1924	R	St. Theresa's Chapel	VA Beach history
704	1943	R	Battery/ Harbor Master	WWII coastal defense, Battery 21, 90mm guns
705	1920s	M	Rec Billets	Temp
707	1986	G	Fitness Center	<50 years old
708	1988	G	Bowling Alley	<50 years old
709	1920s	M	Quarters	Temp
710	1920s	M	Quarters	Temp
711	1920s	M	Quarters	Temp <i>Relocated from Light Station 1940</i>
712	1920s	M	Quarters	Old cottage, but temp
713	1920s	M	Rec Billets	Temp
714	1930s	M	Quarters	Temp
715	1930s	M	Rec Billets	Temp
716	1930s	M	Rec Billets	Temp
717	1930s	M	Rec Billets	Temp
718	1920s	M	Quarters	Temp
719	1930s	M	Rec Billets	Temp

Table 1 (Continued)

Bldg. No.	Date Built	Significance Code	Historic/ Current Use	Why or Why Not Significant
720	1942	M	Rec Center	No integrity
721	1930s	M	Rec Billets	Temp
723	1920s	M	Former Girls' Camp	Temp
724	1920s	M	Garage	Temp
727	ca.1933 <i>1940 1934</i>	G	Post Engineer Building	Listed in property records as 1959, may have been privately constructed and transferred to the Army. May warrant further investigation. <i>PLATE HOUSE MR. GUTHRIE. T.W. DILLON.</i>
731	1958	G	Quarters	<50 years old
732	1958	G	Quarters	<50 years old
734	1918	R	Weather Station/ CO's Quarters	Weather station/joint service harbor entry control/COs quarters/ individually elig.
735	1989	G		<50 years old
736	1949	M	Garage	Temp
750	1942	M	Storage	Temp
751	1942	M		Temp
753	1942	M	Flammable Storage	WWII coastal defense, but isolated and secondary
754	1942	M		Temp
755	1942?	M		Temp
756	1942	M		Temp
757	1942	M		Temp
758	1942	M		Temp
759	1942	M		Temp
760	1942	M		Temp
761	1942	M		Temp
762	1942	M		Temp
763	1942	M		Temp
765	1988	G		<50 years old
766	1942	M		Temp
767	1942	M		Temp
768	1942	M		Temp

Table 1 (Continued)

Bldg. No.	Date Built	Significance Code	Historic/ Current Use	Why or Why Not Significant
770	1934?	M		Temp
771	1942	M		Temp
772	1955	G		<50 years old, Temp
801	1968	G		<50 years old
803	1968	G		<50 years old
804	1968	G		<50 years old
807	1944	R	Battery/Tenant	WWII coastal defense Battery #4, 2-16" guns
808	1968	G		
809	1944	R	Plotting Room for Battery #4 (807)	WWII coastal defense, Battery #4, 2-16" guns
810	1968	G	Vehicle Maint.	<50 years old
811	1953	G		<50 years old
812	1968	G	Oil Storage	<50 years old
813	1958	M		Nike related support building, but <50 years old
820	1981	G	Waste Treatment	<50 years old
821	1995	G		<50 years old
822	1997	G	HAZMAT Storage	<50 years old
823	1958	G	Waste Treatment	<50 years old
825	1958	M		Nike related support building, but <50 years old
828	1958	M		Nike related support building, but <50 years old
829	1958	M	Power Plant	Nike related support building, but <50 years old
830	1958	G		<50 years old
832	1958	M		Nike related support building, but <50 years old
834	1980s	G	Water Tower	<50 years old
837	1966	R	Missile Launcher	Nike missile site Although <50 years old, exceptional significance.
839	1966	R	Missile Launcher	Nike missile site Although <50 years old, exceptional significance.
840	1959	G		<50 years old

Table 1 (Continued)

Bldg. No.	Date Built	Significance Code	Historic/ Current Use	Why or Why Not Significant
841	1966	R	Missile Launcher	Nike missile site Although <50 years old, exceptional significance.
845	1958	M	Dining	Nike related support building, but <50 years old
847	1958	M	Enlisted Housing	Nike related support building, but <50 years old
849	1958	M	Enlisted Housing	Nike related support building, but <50 years old
851	1958	M	Administration	Nike related support building, but <50 years old
853	1958	M	Flammable Storage	Nike related support building, but <50 years old
860	1985	G		<50 years old
861	1985	G		<50 years old
862	1985	G		<50 years old
863	1992	G		<50 years old
864	1985	G	Dining	<50 years old
865	1987	G	Heat Plant	<50 years old
893	1920s	M	Quarters	Temp
896	1947	G	Waste Treatment	Temp
899	1957	G	Water Treatment	<50 years old
900	1922	R	Mine Casemate	Coastal defense, Battery 7-A
904	1920s	M	Quarters	Old frame cottage, but temp
905	1920s	M	Quarters	Old frame cottage, but temp
906	1920s	M	Quarters	Old frame cottage, but temp
908	1947	M	Heat Plant	
910	1920s	M	Rec Billets	Old frame cottage, but temp
911	1920s	M	Quarters	Old frame cottage, but temp
912	1920s	M	Quarters	Old frame cottage, but temp
920	1940	R	Observation Tower	WWII coastal defense
921	1922	R	Observation Bldg.	WWII coastal defense, affiliated with 900
931	1943	M	Warehouse	WWII coastal defense, but temp
940	1958	M		Former Nike radar site, but loss of integrity
941	1958	M		Former Nike radar site, but loss of integrity

Table 1 (Continued)

Bldg. No.	Date Built	Significance Code	Historic/ Current Use	Why or Why Not Significant
942	1958	M		Former Nike radar site, but loss of integrity
943	1958	M		Former Nike radar site, but loss of integrity
950	1958	M		Former Nike radar site, but loss of integrity
951	1958	M		Former Nike radar site, but loss of integrity
1003	1990	G		<50 years old
1004	1941	M	Auto Skill Center	Temp
1011	1996	G	HAZMAT Storage	<50 years old
1012	1941	M		Temp
1013	1941	M		Temp
1014	1941	M	Entomology	Temp
1015	1941	M		Temp
1016	1941	M	Dining	Temp
1018	1941	M		Temp
1019	1941	M		Temp
1020	1996	G		<50 years old
1022	1941	M	Dining	Temp
1023	1941	M	Barracks	Temp
1025	1941	M		Temp
1028	1941	M	Dining	Temp
1029	1941	M	Barracks	Temp
1030	1941	M		Temp
1031	1941	M		Temp
1035	1941	M	Dining	Temp
1036	1941	M	Barracks	Temp
1037	1941	M	Barracks	Temp
1038	1941	M	Barracks	Temp
1041	1941	M	Storage	Temp
1042	1941	M		Temp
1044	1941	M		Temp

Table 1 (Continued)

Bldg. No.	Date Built	Significance Code	Historic/ Current Use	Why or Why Not Significant
1048	1941	M		Temp
1053	1941	M	Vehicle Maint.	Temp
1055	1995	G		<50 years old, temp
1056	1998	G		<50 years old
1063	1941	M		Temp
1071	1960	G		<50 years old
1072	1941	M		Temp
1074	1941	M	Waste Treatment	Temp
1075	1941	M	Recruit	Loss of integrity
1076	1998	G		<50 years old
1077	1942	M	School of Music	Loss of integrity
1078	1942	M	Gymnasium/ Navy Explosives Disposal	Loss of integrity
1079	1941	M	Quarters	Temp
1080	1941	M	Bowling Alley/ Reserve Center	Loss of integrity
1081	1953	G	Vehicle Maint	<50 years old
1082	1953	G	Vehicle Maint	<50 years old
1083	1958	G	Vehicle Maint	<50 years old
1084	1986	G		<50 years old
1088	1964	G	Vehicle Maint	<50 years old
1089	1964	G	Oil Storage	<50 years old
1093	1944	R	Magazine	WWII coastal defense, paired magazines with buttressed blast walls
1094	1944	R	Magazine	WWII coastal defense, paired magazines with buttressed blast walls
1095	1944	R	Magazine	WWII coastal defense, paired magazines with buttressed blast walls
1096	1944	R	Magazine	WWII coastal defense, paired magazines with buttressed blast walls
1097	1944	R	Magazine	WWII coastal defense, paired magazines with buttressed blast walls

Table 1 (Continued)

Bldg. No.	Date Built	Significance Code	Historic/ Current Use	Why or Why Not Significant
1098	1944	R	Magazine	WWII coastal defense, paired magazines with buttressed blast walls
1100	1942	G	Gate	No integrity
1101	1989	G	Water Supply	<50 years old
1102	1942	G	Dining	Loss of integrity
1103	1989	G	Vehicle Maint.	<50 years old
1105	1940	R	Switchboard/cable hut	WWII coastal defense
1106	1989	G	Flammable Storage	<50 years old
1107	1989	G	Water Supply	<50 years old
1108	1989	G	Vehicle Maint.	<50 years old
1109	1989	G		<50 years old
1110	1953	G	Vehicle Maint.	<50 years old
1111	1989	G	Flammable Storage	<50 years old
1113	1989	G		<50 years old
1115	1953	G	<i>Switchboard</i>	<50 years old 1940
1116	1994	G	Guest House	<50 years old
1117	1994	G	Guest House	<50 years old
1118	1994	G	Guest House	<50 years old
1119	1994	G	Guest House	<50 years old
1120	1994	G	Guest House	<50 years old
1121	1994	G	Guest House	<50 years old
1122	1994	G	Rec Billets	<50 years old
1123	1994	G	Rec Billets	<50 years old
1124	1994	G	Rec Billets	<50 years old
1125	1994	G	Rec Billets	<50 years old
1126	1994	G	Rec Billets	<50 years old
1127	1994	G	Rec Billets	<50 years old
1202	1941	R	<i>Magazine</i> Indoor Range/ Storage	WWII coastal defense
		M	Alderman Training Range	Memorialized (1982) training range
		M	Spier Field	Memorialized (1957) air field, but relocated in 1970s

7.0 RECOMMENDATIONS

This reconnaissance level survey report describes the significance of Fort Story, as reflected in the permanent buildings constructed between 1792 and 1958. The survey results indicate that a potentially eligible historic district exists at Fort Story, whose boundaries might coincide with the installation site itself ("Alternative 1" - Map 2 of Volume II, Appendix D). Alternatively, a potential discontinuous historic district's boundaries might be drawn to include primarily the contributing buildings ("Alternative 2" - Map 3 of Volume II, Appendix D).

The significance of a historic district at Fort Story can be summarized as follows:

Fort Story poignantly dramatizes the development of the Commonwealth, and indeed of the United States, from fragile Colonial outpost established in 1607 to the World Power that emerged at the close of World War II. The Cape Henry memorial site (with the First Landing Cross), combined with two generations of lighthouses, and the military facilities that housed and supported defense systems developed from World War I through the Cold War can be viewed as a textbook on the defense of this country's shores.

The Army should consult with the staff at DHR to reach a consensus about the buildings and structures that meet the National Register Criteria for Evaluation, and determine whether the proposed boundaries are apt. The Army should discuss with DHR whether a survey of Fort Story's temporary buildings is warranted.

The remarkable resources of Fort Story should be recognized through nomination of the Fort Story Historic District to the National Register of Historic Places. The Army should undertake this nomination with advice and consultation with DHR.

The Army is under constant pressure to consider alternative uses for the land at Fort Story. For example, among the possible uses under study is a golf course. Recognition of the rarity and significance of the coastal defense systems deployed in the dunes of Cape Henry is the first step towards their protection. Planning for undertakings which have the potential to affect buildings and structures that contribute to the significance of Fort Story should take place in accordance with 36 CFR Part 800, the implementing regulations of Section 106 of the National Historic Preservation Act of 1966, as amended.

In summary, the Army's consideration of alternative development possibilities at Fort Story should seek to minimize impacts to Fort Story's significant buildings and structures. The Army's planning process should include consultation with DHR, with local preservation groups, and other parties interested in the history and architecture of Fort Story and Cape Henry.

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Black and White Courtesy Copy of Maps in Appendix D of Volume II

(Note: In Volume II, these maps are color-coded according to Table 1 in Volume I)